

**Integrated Biological and Behavioral Surveillance
Survey among Male Labour Migrants (MLM) in Six
Eastern Districts of Nepal, 2018**

Round I



**Ministry of Health and Population
National Centre for AIDS and STD Control
Teku, Kathmandu
2018**

Field Work Conducted by:

The IBBS Surveys are part of the National HIV Surveillance Plan led by NCASC. The fieldwork of the survey was carried out by Intrepid Nepal with quality assurance from the National Public Health Laboratory and with technical and financial assistance from the National Center for AIDS and STD Control.

ACKNOWLEDGEMENT

This survey, conducted in accordance with the National Plan on HIV and STI Surveillance, aims to support evidence generation towards HIV/AIDS, STI, knowledge, related risk behavior, and prevalence trends through of Integrated Biological and Behavioral Surveillance (IBBS) survey. The survey was carried out by Intrepid Nepal Pvt. Ltd. (INPL) under the leadership of the National Centre for AIDS and STD Control (NCASC). NCASC provided technical and financial support for the survey.

The NCASC team helped to ensure the work was carried out efficiently and scientifically. NCASC team primarily provided the technical support required to ensure proper planning and monitoring of the survey. The survey was completed with support from stakeholder organizations and different individuals. From the outset, we received support from various NGOs and community experts working with MLMs, namely – Sahara Nepal, NSARC and other stakeholders. We thank the staff of Nepal Public Health Laboratory (NPHL) for carrying out quality control assessments of serological tests from biological samples received during the survey.

Nepal Health Research Council (NHRC) provided ethical approval and ensured that survey conducted in accordance with national and international ethical standards for conducting survey among human subjects. We are grateful to them for their support. We acknowledge the support provided by Nepal Police, and District Public Health Office (DPHO) of the survey districts to ensure that the field survey took place safely and in a timely manner.

Furthermore, we highly appreciate WHO, UNAIDS, NPHL and the Technical Working Group (TWG) for their technical inputs. We are grateful to various national and international agencies that supported us directly and indirectly to complete this survey.

We are confident that the findings of this survey will provide crucial evidence regarding the ground realities of HIV/AIDS and STIs in Nepal. Furthermore, we believe that the results will aid in framing policies for reducing the prevalence of HIV/AIDS and improving HIV/AIDS-related prevention efforts.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immuno Deficiency Syndrome
CDC	Center for Disease Control
CHBC	Community and Home-Based Care
CM	Community Mobilizer
DIC	Drop-In Center
DoHS	Department of Health Service
FSW	Female Sex Worker
GFATM	Global Fund for AIDS, Tuberculosis and Malaria
GOs	Government Organization
HIV	Human Immunodeficiency Virus
HTC	HIV Testing Center
IBBS	Integrated Biological and Behavioral Surveillance Survey
INPL	Intrepid Nepal
KAP	Key Affected Population
KP	Key Population
MLM	Male Labour Migrants
MSM	Men who have Sex with Men
NANGAN	National NGOs Network Group Against AIDS, Nepal
NCASC	National Center for AIDS and STD Control
NGOs	Non-Governmental Organization
NHRC	Nepal Health Research Council
NPHL	Nepal Public Health Laboratory
OE	Outreach Educator
PE	Peer Educator
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
PPS	Probability Proportional to Size
PWID	People Who Inject Drugs
RDT	Rapid Diagnostic Test
SDG	Sustainable Development Goals
SGS	Second Generation Surveillance
SITWG	Strategic Technical Working Group
SPSS	Statistical Package for the Social Sciences
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
TWG	Technical Working Group
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction

This Integrated Biological and Behavioral Surveillance (IBBS) survey fieldwork was carried out by Intrepid Nepal (INPL) under the leadership of the National Center for AIDS and STD Control (NCASC). The existing National HIV Strategic Plan (2016-2021) identify male labour migrants (MLM) as one of the key populations (KPs) at a higher risk of HIV infection than the general population.

This is the first round of the IBBS survey conducted among MLM in six eastern districts (Illam, Panchthar, Dhankuta, Jhapa, Morang and Sunsari districts) of Nepal. The first round of survey was undertaken to assess the burden of HIV, other STI prevalence, and its associated factors. This baseline data will also help to analyze trends of HIV prevalence and its associated factors in future.

Methodology

This descriptive serial cross-sectional survey was conducted among MLM in six eastern districts of Nepal namely Illam, Panchthar, Dhankuta, Jhapa, Morang and Sunsari districts. For the purpose of this survey, the definition of an MLM was *“All the male returnee migrant aged 18-49 years, having stayed continuously or with an interruption for at least 3 months in India as a migrant worker and have returned to Nepal within three years prior to the date of survey”*.

A two-stage cluster sampling was used to recruit 630 MLM from 6 eastern Terai districts from 6th April, 2018 to 2nd May, 2018. An area or ward with at least 30 MLM was defined as a cluster. Out of total 57 clusters, 45 clusters were selected based on the probability proportional to size (PPS). In the second stage, 14 MLM were selected from the each selected cluster using a systematic random sampling method to ensure self-weighted sample.

The survey was conducted in compliance with both ethical and human rights standards. Nepal Health Research Council permitted ethical approval for this survey. Written informed consent was obtained from the MLM. Survey centers with laboratories/clinics were set up at easily accessible locations in each survey district. Individual interviews, clinical examinations, and blood collection were carried out in separate rooms at each of the survey centers.

Laboratory Methods

HIV testing was done using Determine HIV 1/2 as the primary method for detecting antibodies against HIV. If the first test presented a negative result, no further tests were conducted and reported such result as HIV negative. For samples that are reactive on the Determine and Unigold, a STATPAK was used to confirm the HIV results. If the STATPAK test result is also reactive, then the status was reported as HIV positive. If the

result of the STATPAK was non-reactive (but Reactive in Determine and Unigold), then the test result was interpreted as inconclusive HIV status. The survey participants with inconclusive HIV results were asked to go to nearby HIV testing and counselling centers within 2 weeks for HIV testing.

Key Findings

Socio-Demographic Characteristics

Most of the MLM were in the age group 20-29 years (48.9%), and the mean age of MLM was 27.7 years. More than one-third of them had only a basic level of education (1-8), and 6.8 percent of the respondents had no formal education. Disadvantaged *Janajati* accounted for the highest proportion of respondents (39.7%), and more than half of the respondents were married (53.7%). Among the married MLM, 54.6 percent had gotten married between the age of 20-29 years and 20.7 percent were married before the age of 19. Half of the respondents (50.6%) were currently living with their wives.

Migration and Mobility

Nearly one-fourth of the respondents had worked in India for less than six months during their last visit. The average months of work duration in India during their last visit was 12 months. Most of the MLM had first visited India at the age of 15-19 years (45.9%), and 67.5 percent were found to be living with their friends during India stay.

Behavior (Sexual Behavior)

More than three-fourths of the MLM reported having sex with women (79.2%), and their first sexual intercourse happened between the ages of 15-19 years (61.1%). The mean age for first sexual intercourse was calculated to be 18.8 years. Additionally, more than half of them had a history of sexual intercourse with a female sex worker (52.3%) and the use of condoms was reported by 49.6 percent of the respondent while having sex with female sex workers in Nepal and 58.4 percent of the respondents used condom while having sex with female sex workers in India. The use of condoms during sexual intercourse with wives/girlfriends during stays in both India and Nepal were observed to be even lower. The habit of carrying condoms was also found in 14.6 percent of the respondents and the most common locations mentioned for obtaining the condoms were pharmacies, health posts/health centers and hospitals.

Other Risk Behavior

Nearly one-fourth of the MLM had tried any drugs (recreational purposes) in the past 30 days, and about 6.8 percent of them had injected drugs as well. The practice of using a pre-used needle or syringe was found in 29.4 percent of MLM who inject drugs, and about 5.9 percent of them were consistent users of pre-used needles/syringes.

Comprehensive Knowledge of HIV

About 87.6 percent of the MLMs had heard about HIV and AIDS. A total of 35.6 percent of the respondents knew all three ABC: A (abstinence from sex), B (being faithful to partner or avoiding multiple sex partners), and C (consistent condom use or use of a condom during every sex act) as HIV preventive measures. The knowledge of all five major indicators of HIV/AIDS (BCDEF) was found in 13.8 percent of the MLMs.

Knowledge of STI, experienced symptoms and Treatment in the Past Year

Most of the MLM understood sexually transmitted infections as HIV/AIDS (50.0%), syphilis (35.6%) and ulcers around genital area (28.1%). Likewise, the most common STI symptoms experienced by the MLM were ulcers or sores around the genital area (11.6%) and a burning sensation while urinating (10.2%). Most of the respondents had not gone for any treatment for the symptoms experienced (72.7%), and among those who had gone for treatment (27.3%), the most common location reported was a private clinic (60.6%).

Met with OE/PE, DIC, HTC, STI in the past 1 year

About 16.7 percent of the respondents had met, discussed, or interacted with peer educators or outreach educators within the last 12 months. Additionally, only 4.1 percent of them visited drop-in centers in the last 1 year, and only 6.8 percent had made an STI visit in the last 1 year. The HTC visit was also done by only 5.6 percent of the respondents. A total of 9.8 percent of the respondents knew that HIV transmission to a baby of an HIV infected woman could be prevented through prevention of mother to child transmission (PMTCT) services.

Stigma and Discrimination

A majority of the respondents showed willingness in taking care of HIV positive male or female relatives in the household. More than half (68.9%) of the MLM revealed no issues in buying food from an HIV infected shopkeeper and also had the opinion that a PLHIV should be allowed to work unless he/she were sick (70.5%). Additionally, most felt that an infected child should be allowed to continue school with other non-infected children (74.9%).

Prevalence of HIV

The prevalence of HIV among male labour migrants of six eastern districts was 0.3 percent. Since this is the first round of survey conducted in these districts, there could be no comparison to prior results. However, the HIV prevalence is almost similar in these survey districts, in comparison to previous rounds of IBBS surveys that have been carried out in Western (0.3%) and Mid to Far western regions (0.6%) in 2015.

CHAPTER I: Introduction

1.1 Introduction

Nepal is categorized as a country facing a concentrated HIV epidemic. The National Centre for AIDS and STD Control (NCASC) has estimated that there were 31,020 people living with HIV (PLHIV) in Nepal in 2017 with adult HIV prevalence of 0.15% (NCASC, 2018). The existing National HIV and AIDS Strategy (2016-2021) identifies people who inject drugs (PWIDs), female sex workers (FSW) and their clients, migrant workers (MLM) and their spouses and men who have sex with men (MSM) as key populations (KPs) at higher risk of getting HIV infection.

The National HIV and AIDS strategy has also guided to strengthen the Second Generation Surveillance (SGS) system as one of key principles of strengthening surveillance of HIV and Sexually Transmitted Infection (STI) in Nepal. One of the major components of SGS, as well as the strategic direction of the national strategy, is to conduct Integrated Biological and Behavioral Surveillance (IBBS) Survey among KPs at higher risk to HIV in selected high-risk areas in regular interval based on the national plan on HIV and STI surveillance. These surveillance studies help in assessing health risk behaviors, measuring prevalence of HIV and STI among key populations, monitoring epidemic trends, and ultimately assisting in plans to respond against HIV epidemic in Nepal.

The Integrated Biological and Behavioral Surveillance (IBBS) survey is a descriptive serial cross-sectional survey conducted to monitor trends in HIV and STI prevalence and to explore behavioral information from high-risk groups. As per previous IBBS surveys, the trend of HIV in MLM is 1.1 percent (2006), 1.1 percent (2012) and 0.3 percent (2015) in the Western Hilly districts whereas the prevalence of HIV in Mid and Far western district the male labour migrants ranges from 2.7 percent (2006) to 0.6 percent in (2015) and was 0.4 percent in the year 2017. This is the first round that is being carried out in Eastern Terai districts under the leadership of NCASC.

Table 1: IBBS Surveys among Male Labour migrants in Nepal

Survey Sites	Rounds	Survey Years
Western to Mid & Far Western Districts	6	2006, 2008, 2010, 2012, 2015, 2017

The table above shows that the IBBS surveys among the male labour migrant population have been carried out in limited geographical areas of the country. In the Eastern Terai highway districts, this is the first IBBS that is being conducted.

1.2 Objectives of the Survey

In line with the objectives of the IBBS survey, this first round of the survey was also undertaken primarily to determine the baseline to assess trend of prevalence of HIV and STI and to assess HIV and STI related risk behaviors among Male Labour Migrants (MLM) in Illam, Panchthar, Dhankuta, Jhapa, Morang and Sunsari districts.

The objectives of the survey were:

- To estimate the uptake of behavioural interventions, knowledge as well as the sexual behaviours related to HIV and STI among MLM in Illam, Panchthar, Dhankuta, Jhapa, Morang and Sunsari districts.
- To explore associations between risk behaviours and infections with HIV and STI infections

1.3 Rationale of the survey

IBBS surveys are one of the component of the second generation surveillance survey and survey data is widely used for designing and monitoring HIV response, developing patient care and treatment programs, and also used as one of the inputs for estimation and projection of HIV infections in many countries, including Nepal. IBBS survey results have been utilized by donors, policy-makers, program designers, evaluators, intervention implementers, academicians, and civil society organizations to track the level of HIV epidemic and related risk behaviors in Nepal. As a key component of the national HIV surveillance plan, IBBS are conducted at regular intervals in Nepal. IBBS surveys are a major source of information for understanding the HIV dynamics including behavior as well as prevalence of HIV and STI among KPs.

The IBBS survey has established its reputation for quality and is the major set of surveillance data in Nepal. As per previous IBBS surveys conducted in West-Mid-Farwest region, the trend of HIV in MLM is 1.1 percent (2006), 1.1 percent (2012) and 0.3 percent (2015) in the Western Hilly districts whereas the prevalence of HIV in Mid and Far western district among the male labour migrants ranges from 2.7 percent (2006) to 0.6 percent in (2015) and 0.4 percent in the year 2017.

We are hopeful that the results obtained regarding the HIV prevalence and risk behaviors among the MLM will trigger the need to address and focus on the SDG's Goal 3 (Ensure Healthy Lives and Promote Well-being for All at All Age). Furthermore, we envision the survey findings will be pivotal to advocate for the need to enhance access to HIV-related information and knowledge among MLM, which can be helpful to guide efforts for reducing HIV prevalence. The findings of this survey will be shared with major (e.g. SRH, HIV prevention) stakeholders in Nepal.

CHAPTER II: Methodology

2.1 Survey design

The survey was descriptive serial cross-sectional in design.

2.2 Survey Population

The survey population of the survey was “*All the male returnee migrant aged 18-49 years, having stayed continuously or with an interruption for at least 3 months in India as a migrant worker and have returned to Nepal within three years prior to the date of survey*”

2.3 Survey Site

This survey was conducted in 6 Eastern Terai districts; Illam, Panchthar, Dhankuta, Jhapa, Morang and Sunsari.

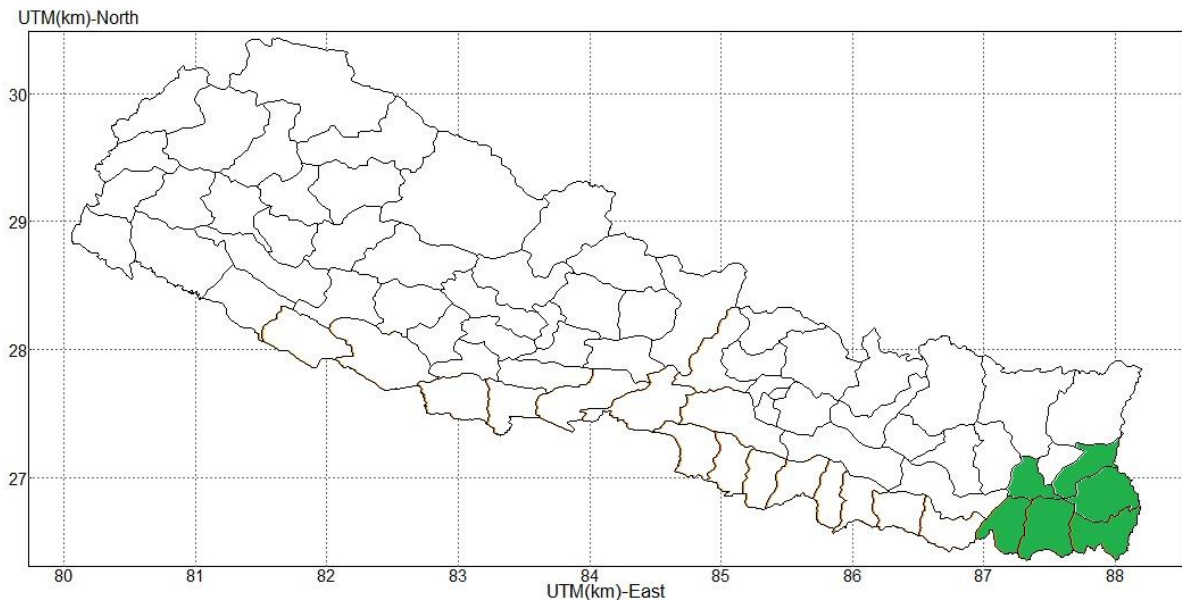


Figure 1: Map of Nepal showing survey districts

2.4 Survey Period

The survey started in March, 2018 and was completed by 15th June, 2018. The fieldwork for the survey started on 6th April, 2018 and was completed on 2nd May, 2018.

2.5 Sample Design

Two-stage cluster sampling method was used to select the MLM. Altogether 45 clusters were selected from Six Eastern districts.

First Stage: Selection of Clusters

The information on the estimated size of the MLM within each district was based on the operational mapping exercise that served as the sampling frame for cluster selection.

Mapping exercise was done to estimate number of MLM in survey districts by collecting information from organizations (GO), and Nongovernment Organizations (NGOs) working with MLM as NANGAN and HELP group, Biratnagar. The team collected information on number of MLM and possible clusters in consultation with local NGOs and finalized the number of MLM in each clusters using the tools and consultations with NGO representatives.

A ward or geographical area with at least 30 MLM was defined as a cluster. Based on the preliminary information collected during the mapping exercise, a list of locations and an estimated number of MLM for each location was prepared. The ward with less than 30 estimated MLM were combined with a neighbouring site to form a full cluster, with a minimum number of a cluster not exceeding 30 MLM. Altogether 57 clusters were identified from this region. Among them, 45 clusters were selected using probability proportional to size (PPS) method. The selected clusters along with map are presented in the annexure.

Second Stage: Selection of Respondents

The field teams visited each of the selected clusters to prepare a list of MLM who met the eligibility criteria for the survey. Cluster-wise list of MLM was created, and ID generation was done to identify MLM form list. Using simple random sampling technique, 14 MLM were selected consecutively from each of the respective clusters. The list of selected MLM name list was provided to the motivator, and the motivator was allocated to the selected MLM to the survey site. This resulted in the selection of a total of 630 MLM altogether.

Table 2: An Overview of Number of Clusters Selected in Survey Districts

Districts	Total no of cluster	No of clusters selected
Panchthar	1	1
Ilam	2	1
Dhankuta	1	1
Jhapa	18	16
Morang	21	16
Sunsari	14	10

2.6 Sample Size

The sample size was determined by using a basic statistical formula that estimated a sample size of 630 MLM. An equal number (i.e. 14 from each cluster) were interviewed for the strategy of self-weighted design. For sample size formula, refer to annex 1.

2.7 Recruitment

The field teams, along with community motivators, visited selected clusters to prepare a list of MLM who met the criteria of the survey. From the list created separately, 14 MLM were

selected by systematic random sampling method from each selected cluster. Then the selected MLM forming each cluster were invited to participate in the survey. In such situations, community mobilizers and peer educators of ongoing HIV/AIDS programs and social workers working in organizations such as HELP group, Biratnagar and NANGAN were utilized for approaching the selected MLM and inviting them to participate in the survey. At least three attempts were made to contact and include the potential participants. If this was not successful within three attempts, the person was replaced by another MLM selected randomly from the same cluster.

2.8 Data collection tools and techniques

The survey used a structured questionnaire to assess background characteristics, sexual risk behaviors, use of condoms, knowledge and awareness of HIV/AIDS and STIs, exposure to HIV/AIDS programs, drug injecting behaviors, stigma, and discrimination. The questionnaire was developed with reference to the existing questionnaire used in the previous round of IBBS survey among MLM in different districts. Modifications were made to the questionnaire based on the pretest. All data collection tools were developed in Nepali, and the interviews were conducted in the Nepali language. ODK software was used for tablet-based data collection. The merits of the tablet-based data collection were that the obtained data were sent to the central server at the same day of data collection and also the collected data were available for observation by central survey team in order to assess the progress made.

2.9 Survey Personnel

The survey team comprised of a team leader, a research officer, a database developer, data entry personnel, a statistician, field researchers, lab technicians, health assistants, counselors, community motivators, and support staff. The field team included a research officer, field researchers, lab personal, a health assistant, counselors, and support staff, whereas the survey team included a database developer, data entry personnel, and a statistician.

2.10 Training of Field Team and Pretesting

The field team was provided with 5 days of training by Intrepid Nepal from 22nd March, 2018 to 28th March, 2018. The relevant experts (SI Focal person, SI Specialist, M&E coordinators) from NCASC facilitated the training. The training covered an overview of IBBS, HIV Epidemic and Surveillance System in Nepal, survey design and approaches, sampling approaches, behavioral interviews, interview process, administering informed consent/assent, data collection tools, and role(s) and responsibilities of the team members. The training was followed by mock interview exercises in pairs and large group reflection that involved a discussion of mock exercises. Additionally, experts from MLM networks and organizations also shared their experiences of working with MLM.

With the help of National NGOs Network Group Against AIDS, Nepal (NANGAN) implementing agencies (through their peer educator's/outreach educators), contacted MLM and invited them for the pretest with the inclusion of the survey tools. The pretest was carried out in a confidential space on the office agreed upon by the MLM and consent was taken from all the survey participants. A total of 4 MLM were interviewed during the pretesting that was held on 28th March, 2018. The tools were revised based on the pretest. Information collected during the pretest was not included in the main analysis.

2.11 Fieldwork

The actual fieldwork of the survey started on 6th April, 2018 to 2nd May, 2018. Before the fieldwork, a stakeholder meeting was conducted among representatives from government organizations (GOs) and I/NGOs working with MLM. During the meeting, participants shared their experiences and knowledge about different types of MLM, and provided further support to the survey. After the consultation meeting, the survey team contacted the potential Community mobilizers (CMs) and prepared them with required information regarding the target population for the survey. The survey team, with the help of CMs, listed the required number of MLM in the selected clusters. Six sites were established for inclusion of respondents in the survey: Panchthar, Illam, Dhankuta, Jhapa, Morang and Sunsari. The base clinic site was centrally located specifically for the convenience of meeting and bringing the MLM to the individual survey sites. The details of the clinic site are in the table below;

Table 3: Field Work days along with clinic site

S.No	Districts	Clinic Site	No of field days
1.	Panchthar	Pashupatinagar	4
2.	Illam		
3.	Dhankuta	Bhedetar	2
4.	Jhapa	Birtamod	14
5.	Morang	Biratnagar	14
6.	Sunsari	Inaruwa	6

The field office had six separate rooms for each activity such as welcome and registration, interviews, general physical and STI examinations, drawing blood and laboratory testing of blood, and pretest and posttest counseling. Before the interview, MLM were informally asked a few questions in order to ensure that they met the eligibility criteria set for the survey. Injecting marks were also observed in order to screen for injecting behavior (i.e. skin lesions, abscesses, or puncture wounds).

Strict confidentiality was maintained throughout the survey. All interviews were conducted by researchers in a private room. No personal identifiers were recorded in the tools or notes.

Instead, participants were provided with a unique ID number written on a plastic coated card. The same number was marked on the questionnaire, on the medical record, and blood specimen of each respondent. This card was also used for the distribution of the test results. The entire work of fieldwork was completed on 2nd May, 2018.

The field work was supported by several local organizations working in the survey districts. The organizations assisted in tracking the MLM and bringing them to the clinic site. The organizations which helped in every possible way actively were; National NGOs Network Group Against AIDS, Nepal (NANGAN) and HELP group, Biratnagar.

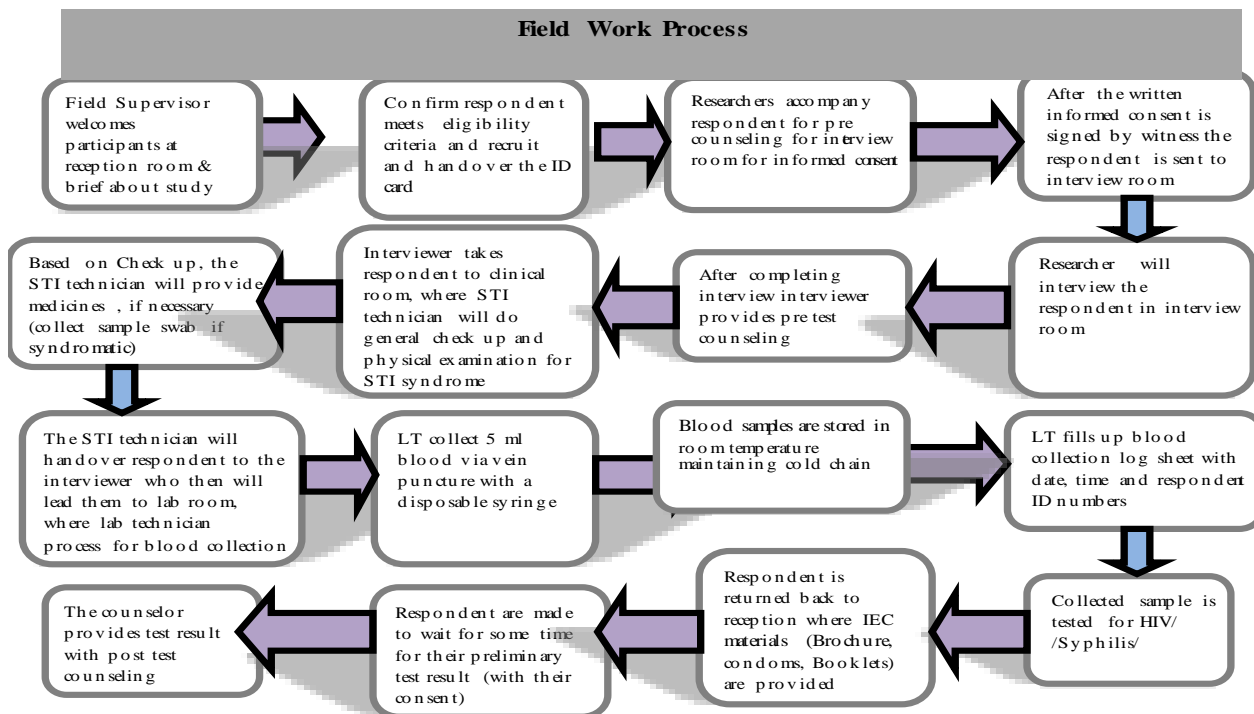


Figure 2: Fieldwork Process for IBBS Surveys

2.12 Refusal

All MLM participated voluntarily in the survey, and none of the MLM approached by the survey team refused to participate in the survey.

2.13 Clinical and Laboratory Procedure

MLMs were checked for any clinical symptoms of STIs by a certified health assistant who also filled out a checklist of health information provided by each participant. The clinical examination included a simple health checkup (measuring blood pressure, body

temperature, weight, and pulse) and a symptomatic examination for the presence of any STIs followed by any necessary syndromic treatment (NCASC, National guidelines on Case Management of sexually transmitted infections, 2014). Laboratory service entailed onsite rapid screening of HIV 1/2 followed by a confirmation test.

Approximately 5 ml of whole blood was drawn from each of the MLM using a disposable syringe. The blood sample was centrifuged to separate the blood cells from the serum. Each sample was labeled with the unique ID number correlating to an individual MLM. Following collection, a lab technician used the serum to perform a rapid HIV test and RPR test. Universal precautions and safe waste management practices were followed properly. For external quality assurance of tests, all positive and randomly selected 10 percent of negative samples were sent to the National Public Health Laboratory (NPHL) in Kathmandu for external quality assurance.

HIV 1/2

The HIV screenings of serum samples were performed using rapid test kits following the national HIV testing algorithm. Determine HIV 1/2 (Abbot, Japan), Uni-Gold HIV 1/2 (Trinity Biotech, Ireland), and Stat-Pak HIV 1/2 (Chembio Diagnostics), as per the NCASC, National HIV Testing and Treatment Guidelines 2017. All the kits were based on the immune chromatography principle for detecting antibodies against HIV in serum or blood. A serum that tested reactive with the first kit was confirmed with the second kit (A2) and Third Kits (A3). Samples that were found reactive on all three (A1, A2 and A3) tests were considered HIV-positive. Samples that were nonreactive on the first test (A1) were considered HIV-negative. Any sample that was reactive on the first (A1) and nonreactive in the second test (A3) then we repeated the tests (A1, A2) with the same individual sample, and if retested result is same (A1 reactive and A2 reactive) then the sample was considered HIV negative. Any sample that was reactive on the first (A1), second (A2) test and nonreactive in the third test (A3) then we repeated all the three tests (A1, A2, and A3) with the same individual sample, and if retested result is same (A1, A2 positive and A3 negative) then the sample was considered HIV inconclusive. In that condition, respondent was suggested to repeat the test after 14 days. The internal quality of the assay was assured by the inbuilt control of each kit and external quality was assured by sending all positive cases and 10% of negative cases to reference lab (NPHL).

needles were decontaminated in 0.5% Sodium Hypochlorite on a daily basis. The plastic material, papers and cotton were incinerated. The used Sodium Hypochlorite was poured down the drain or in a flush toilet.

2.15 Quality Control of Laboratory Tests and External Quality Assurance Scheme

Quality control was strictly maintained throughout the process of specimen collection, as well as during the handling and testing stages. All the tests were performed using internal controls. Built-in controls for the Rapid Diagnostic Test (RDT) and known external controls (positive and negative) were used to ensure the validity of the tests. These controls were recorded with all of the laboratory data. For external quality control assurance, all positive, and randomly selected 10 percent sample of the negative serum collected were submitted to the NPHL to test for HIV. Aliquots of selected serum specimens were prepared in the field and sent to the INPL lab within a week maintaining cold chain system.

External Quality Assessment

An External quality assessment (EQA) involves the evaluation of the performance of a testing laboratory through a recognized external agency as a measure of quality control. To quantify the quality of testing in this study, an elaborate External Quality Assessment Scheme (EQAS) was developed, where all samples that tested positive for HIV were sent to NPHL for retesting. Similarly, 10 percent of all HIV samples which had tested negative respectively were also sent to NPHL for retesting. As per the protocol for ECA, firstly, aliquots of selected serum specimens prepared in the field were sent to Intrepid Nepal’s laboratory in Kathmandu within a week of collection for optimum storage at a temperature below -20°C. Once field testing activities were completed, the specimens stored at Intrepid-Nepal were handed over to NPHL for retesting. To ensure validity and reliability, test kits used during field testing were provided to NPHL.

HIV Testing MLM

A total of 65 samples were transported to NPHL for HIV testing; out of which 2 were identified as positive for HIV and 63 samples were negative for HIV. The kappa value for this test was calculated as 1.

Summary of results of External Quality Assessment of HIV Testing among MLM in Six Eastern Districts of Nepal

		NPHL Results		Total
		Negative	Positive	
Intrepid results	Negative	63	00	63
	Positive	00	02	02

Total	63	02	65
Percentage Agreement = 100 %			
Kappa*=1			
Strength of agreement= Almost perfect agreement			

2.16 Fieldwork Supervision and Monitoring

The progress of the fieldwork was closely monitored throughout the survey period. The survey team visited survey sites on an ongoing basis to monitor, supervise, and assist the field staff. A tracking sheet was developed to document the number of interviews conducted per day at each site.

Similarly, quality of the collected data was maintained throughout the survey period. The team leader and research officer were both involved in monitoring controlling quality from the initial stage of the fieldwork. They reviewed forms to ensure that: 1) the correct clusters had been surveyed; 2) the correct number of MLM had been interviewed, and 3) the correct administration of the questionnaires and recording had been carried out. They also checked the completed forms randomly, provided feedback, and made random revisits to ensure data quality. External monitors from NCASC and different INGOs also monitored the fieldwork.

2.17 Data management

Estimation of the size of the survey population and their distribution in the survey areas was collected. Lists and maps were generated from the operational mapping exercise. The completed questionnaires were rechecked regularly by a field researcher and field supervisor to ensure that the questionnaires were filled out properly. Furthermore, the electronic data was extracted into MS Excel for verification and transferred into Statistical Package for the Social Sciences (SPSS). A number of quality check mechanisms including range checks, logical checks, and skip instructions were developed to minimize the errors during the data collection phase.

To ensure confidentiality, each MLM was given a unique identity number. The numbers were coded in each questionnaire. The numbers, however, did not correspond to the names, contact numbers or addresses of the participants of the survey. The trained staff of Intrepid Nepal performed data entry and coding. All entered data was kept secure in encrypted, password protected computers at the research organization to ensure anonymity of the participants.

2.18 Data analysis

Data was analyzed using descriptive statistics and bivariate analysis. Data was analyzed using SPSS and R program for statistical analysis. Descriptive analysis of background characteristics, sexual behavior and sexual intercourse history, HIV risk-related behaviors and knowledge of HIV/STIs, use and availability of condoms, knowledge of HIV and AIDS awareness programs, and drug injecting behaviors were explored. Bivariate analysis of the key indicators of HIV related risk behaviors were performed. R program was used to create graphs.

2.19 Ethical Considerations

Nepal Health Research Council (NHRC) approved the protocol of the survey. The survey was conducted in compliance with all human rights and ethical standards required by health researchers conducting studies in human subjects on sensitive issues, such as HIV and AIDS.

Informed consent was obtained from MLM prior to the interview. The procedure of the survey was designed to protect privacy of the participants' allowing for anonymous and voluntary participation. All the field staffs were strictly prohibited from recording any personal identifiers in the tablet-based questionnaire. However, we used written informed consent and requested participants to write their short name or nickname with signature (signature should not be a real one which they use for the official purpose). We requested MLM with no formal education to cross 'X' sign in the informed consent document instead of their signature. We did not link informed consent with the tablet-based questionnaire. They were provided with information about the risks, confidentiality, and compensation. The participants were given the opportunity to ask questions about the survey and to decide whether they would like to participate in the survey. During the consent process, the participants were told that they were free to refuse or decline to participate at any stage of the survey. Although the risk of participating in this survey was minimal, some questions could make the survey subjects uncomfortable. They were clearly informed that in such a situation they were free to decline to answer such questions and could withdraw from the survey at any time. Best efforts (confidential, free to withdraw from survey any time) were made to minimize risks associated to survey participants. During the analysis and presentation of the survey findings, the names or addresses of the MLM were not mentioned.

2.20 Post Test Counseling and Distribution of Test Result

All MLMs (100%) who were tested obtained their individual test results. All of the respondents, who wanted their test results and showed their ID card, were given access to their individual HIV test results along with free posttest counseling. Posttest counseling and individual report dissemination program was conducted for the MLM on the same day of the interview. The counseling session was provided by trained counselors and focused on high-risk behaviors and other aspects related to STI and HIV. Some participants were also referred to other health facilities for further HIV prevention and treatment services.

2.21 Limitations of the survey

- This survey was conducted in six eastern Terai districts in Nepal. The analysis and results presented in this report are, therefore, confined to these districts, and may not be generalized to other districts or any other parts of the country.
- So far IBBS has adopted descriptive serial cross-sectional sampling designs, which limits the cause-effect relationship.
- Few sensitive responses or questions that require to remember past information might be biased due to recall bias or social desirability bias.

CHAPTER III: Findings

3. Results

The results are comprised of biological and behavioral components. The biological components include prevalence of HIV, and the behavioral component consists of background characteristics, sexual behaviors, use of a condom with different partners, experience of violence, knowledge of HIV, and exposure to HIV programs, drug injecting behaviors, stigma, and discrimination among MLM.

Sample distribution

A total of 630 male labour migrants participated in the survey. The survey was carried out in six Eastern districts of Nepal (Dhankuta, Illam, Jhapa, Morang, Panchthar and Sunsari). More than one-third of participants were represented from Jhapa and Morang district each (35.6%, n=224). A near to one-fourth participants were included from Sunsari district (22.2%, n=140). The rest of the participants were from Dhankuta (2.2%, n=14), Illam (2.5%, n=16) and Panchthar (1.9%, n=12) respectively (Figure:4).

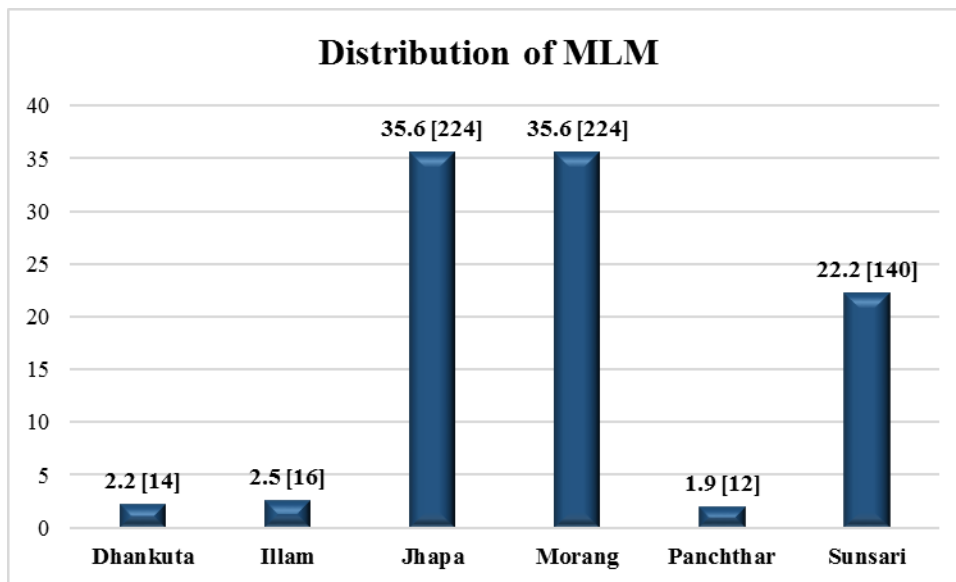


Figure 4: Distribution of Male Labour Migrants

3.1 Socio-demographic characteristics

The survey explored the socio-demographic characteristics of MLM in the survey districts. Nearly half of the MLM (48.9%) were of age group 20-29 years. The mean age was calculated to be 27.8 years, and the median age was 25.0 years. Almost one-third of the MLM (35.6%) had basic education (grade 1-8), and 28.9 percent were SLC passed. Similarly, about one-fourth of the MLM (25.2%) surveyed were from disadvantaged non-Dalit Terai caste group, and 39.7 percent were disadvantaged Janajatis. More than half (53.7%) of the MLM were married, and among them, 20.7 percent were married before the age of 19 years. Additionally, half of the MLM (50.6%) were reported to be living with their wives, and about 44.6 percent were living with their parents.

Table 4: Socio-Demographic Characteristics of MLM

Characteristics	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Age														
18-19 years	2	14.3	1	6.3	26	11.6	30	13.4	-	-	41	29.3	100	15.9
20-29 years	3	21.4	6	37.5	105	46.9	125	55.8	3	25.0	66	47.1	308	48.9
30-39 years	3	21.4	8	50.0	58	25.9	44	19.6	7	58.3	28	20.0	148	23.5
40-49 years	6	42.9	1	6.3	35	15.6	25	11.2	2	16.7	5	3.6	74	11.7
Mean age ± Std. dev)	35.0 ± 10.8		30.2 ± 7.3		29.2 ± 8.7		27.3 ± 8.2		33.1 ± 8.0		24.8 ± 7.1		27.8 ± 8.4	
Median age (range)	36.5 (18-49)		30.0 (18-49)		27.0 (18-49)		24.5 (18-49)		34.0 (21-48)		23.0 (18-46)		25.0 (18-49)	
Level of education														
Illiterate	-	-	-	-	7	3.1	27	12.1	-	-	9	6.4	43	6.8
Literate Only	3	21.4	4	25.0	32	14.3	6	2.7	2	16.7	1	0.7	48	7.6
Basic education*	3	21.4	5	31.3	44	19.6	120	53.6	6	50.0	46	32.9	224	35.6
Secondary**	1	7.1	1	6.3	24	10.7	25	11.2	-	-	13	9.3	64	10.2
SLC passed	5	35.7	5	31.3	74	33.0	34	15.2	4	33.3	60	42.9	182	28.9
Intermediate passed and +	2	14.3	1	6.3	43	19.2	12	5.4	-	-	11	7.9	69	11.0
Caste/ethnicity														
Dalit	1	7.1	1	6.3	13	5.8	20	8.9	-	-	1	0.7	36	5.7
Disadvantaged Janajatis	6	42.9	7	43.8	91	40.6	106	47.3	4	33.3	36	25.7	250	39.7
Disadvantaged non-dalit Terai caste groups:	-	-	-	-	14	6.3	62	27.7	2	16.7	81	57.9	159	25.2

Religious Minorities	-	-	-	-	6	2.7	10	4.5	-	-	11	7.9	27	4.3
Relatively advantaged Janajatis	-	-	-	-	7	3.1	4	1.8	-	-	3	2.1	14	2.2
Upper caste groups	7	50.0	8	50.0	93	41.5	22	9.8	6	50.0	8	5.7	144	22.9
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100
Marital Status														
Married	9	64.3	9	56.3	122	54.5	134	59.8	8	66.7	56	40.0	338	53.7
Divorced/permanently separated	1	7.1	-	-	2	.9	4	1.8	-	-	-	-	7	1.1
Widowed	-	-	1	6.3	-	-	2	.9	-	-	-	-	3	.5
Never married	4	28.6	6	37.5	100	44.6	84	37.5	4	33.3	84	60.0	282	44.8
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100
Age at first marriage														
Less than 19 years	1	10.0	2	20.0	17	13.7	39	27.9	1	12.5	12	21.4	72	20.7
20-24 years	3	30.0	6	60.0	64	51.6	72	51.4	6	75.0	39	69.6	190	54.6
25-29 years	3	30.0	2	20.0	32	25.8	25	17.9	1	12.5	5	8.9	68	19.5
More than 30 years	3	30.0	-	-	11	8.9	4	2.9	-	-	-	-	18	5.2
Mean age	26.4		21.4		23.6		21.6		22.3		21.2		22.4	
Median age	25.0		21.0		23.0		21.0		22.0		21.5		22.0	
Total	10	100	10	100	124	100	140	100	8	100	56	100	348	100
Living status of MLM														
With wife	9	64.3	9	56.3	114	50.9	123	54.9	8	66.7	56	40.0	319	50.6
With male friends	-	-	-	-	6	2.7	-	-	-	-	1	.7	7	1.1
Alone	-	-	-	-	13	5.8	2	0.9	1	8.3	1	.7	17	2.7
With parents	5	35.7	6	37.5	90	40.2	96	42.9	3	25.0	81	57.9	281	44.6
With children	-	-	1	6.3	-	-	1	0.4	-	-	-	-	2	0.3
Other family members	-	-	-	-	1	0.4	2	0.9	-	-	1	0.7	4	0.6
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100

Ethnicity category is according to CBS 2001

* Basic education: Grade 1-8; **secondary: 9-10

3.2 Migration and Mobility

The findings below describe the migration and mobility characteristics of the male labour migrants. The survey showed that a close to half (47%) of the MLM had worked in India for 6-12 months during their last visit and almost one-fourth (23.7%) were there for less than 6 months' time period. About 45.9 percent of them visited India at the age of 15-19 years and the average age calculated was 20.1 years. Likewise, almost half of the surveyed population (47.4%) had visited Nepal within the last 6 months while about 27.8 percent were found to have visited Nepal within the last 6-12 months. Most of the MLM (67.5%) reported living with their friends in India and about one-fourth of them (24.3%) were living with relatives.

Table 5: Work and migration

Characteristics	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Work duration in India during last visit														
3 - 6 months	1	7.1	1	6.3	56	25.0	63	28.1	2	16.7	26	18.6	149	23.7
6-12 months	8	57.1	7	43.8	100	44.6	103	46.0	3	25.0	75	53.6	296	47.
13-24 months	4	28.6	5	31.3	44	19.6	45	20.1	5	41.7	31	22.1	134	21.3
More than 24 months	1	7.1	3	18.8	24	10.7	13	5.8	2	16.7	8	5.7	51	8.1
Average months	13.1		15.7		12.0		11.1		20.3		12.1		12.0	
Age during the first visit to India														
Less than 15 years	-	-	1	6.3	24	10.7	30	13.4	-	-	11	7.9	66	10.5
15-19 years	5	35.7	3	18.8	85	37.9	108	48.2	4	33.3	84	60.0	289	45.9
20-24 years	4	28.6	8	50.0	59	26.3	53	23.7	1	8.3	29	20.7	154	24.4
25-29 years	4	28.6	2	12.5	28	12.5	14	6.3	3	25.0	10	7.1	61	9.7
More than 30 years	1	7.1	2	12.5	28	12.5	19	8.5	4	33.3	6	4.3	60	9.5
Average age	22.1		22.3		20.8		19.6		26.3		19.0		20.1	
Last visit to Nepal														
Less 6 months	4	28.6	5	31.3	89	46.6	113	57.4	4	36.4	44	37.6	259	47.4
6-12 months	5	35.7	4	25.0	54	28.3	49	24.9	3	27.3	37	31.6	152	27.8
13-24 months	3	21.4	4	25.0	27	14.1	30	15.2	1	9.1	32	27.4	97	17.8
24-36 months	2	14.3	3	18.8	21	11.0	5	2.5	3	27.3	4	3.4	38	7.0
Average months	12.4		14.4		8.7		6.7		11.6		8.6		8.2	
Living status of MLM in India														
Alone	2	14.3	-	-	13	5.8	23	10.3	-	-	11	7.9	49	7.8
With wife	-	-	-	-	3	1.3	-	-	-	-	-	-	3	.5
With friends	10	71.4	15	93.8	159	71.0	147	65.6	9	75.0	85	60.7	425	67.5
With relative	2	14.3	1	6.3	49	21.9	54	24.1	3	25.0	44	31.4	153	24.3
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100

3.3 Sexual Behavior

3.3.1 Sexual Behavior of MLM

The findings below describe the MLM sexual behavior. Most of the MLM (79.2%) reported having sex with a woman and among them, more than half had their first sexual intercourse between the ages of 15-19 years. Early entry into sexual life was observed more common in MLM of Panchthar district (less than 15 years; 10.0 %) in comparison to respondents of other districts. Additionally, more than half of the respondents (52.3%) revealed having sexual intercourse with female sexual workers whereas the remaining had no such history.

Table 6: Sexual behavior of MLM

Sexual Behavior	Dhankuta		Ilam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Ever had sexual intercourse with a woman														
Yes	12	85.7	12	75.0	179	79.9	190	84.8	10	83.3	96	68.6	499	79.2
No	2	14.3	4	25.0	45	20.1	34	15.2	2	16.7	44	31.4	131	20.8
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100
Age at first sexual intercourse (n=499)														
Less than 15 years	-	-	1	8.3	6	3.4	12	6.3	1	10.0	3	3.1	23	4.6
15-19 years	7	58.3	4	33.3	101	56.4	128	67.4	4	40.0	61	63.5	305	61.1
20-24 years	3	25.0	5	41.7	55	30.7	42	22.1	4	40.0	30	31.3	139	27.9
25 years and more	2	16.7	2	16.7	17	9.5	8	4.2	1	10.0	2	2.1	32	6.4
Mean age	20.7		19.7		19.4		18.1		19.9		18.5		18.8	
Median age	18.5		20.0		18.0		18.0		20.5		18.0		18.0	
Total	12	100	12	100	179	100	190	100	10	100	96	100	499	100
Ever had sex with a female sex worker (n=499)														
Yes	1	8.3	2	16.7	50	27.9	147	77.4	-	-	61	63.5	261	52.3
No	11	91.7	10	83.3	129	72.1	43	22.6	10	100.0	35	36.5	238	47.7
Total	12	100	12	100	179	100	190	100	10	100	96	100	499	100

3.3.2 Sexual behavior with female sex workers in Nepal

The survey also assessed the sexual behavior of male labour migrants with female sex workers in Nepal. Only those respondents who reported having sex with female sex worker in the prior question were asked these series of questions regarding sexual behavior with female Sex workers in Nepal. More than half of the respondents (66.7%) reported having sex with female sex workers in Nepal. Similarly, most of the respondents also had sexual intercourse with female sex workers in the past one year (70.7%) and among them, half of them (51.2%) had sexual relation with 1-2 FSWs, and almost one-fourth (22.0%) had sex with 2-3 FSWs.

Table 7: Sexual Behavior with Female Sex Workers in Nepal

Sexual Behavior	Dhankuta		Illam		Jhapa		Morang		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Ever have had sex with a female sex worker (n=261)												
Yes	1	100.0	2	100.0	30	60.0	101	68.7	40	65.6	174	66.7
No	-	-	-	-	20	40.0	46	31.3	21	34.4	87	33.3
Total	1	100	2	100	50	100	147	100	61	100	261	100
Sex with a female sex Worker at Nepal in the past year (n=174)												
Yes	-	-	1	50.0	17	56.7	73	72.3	32	80.0	123	70.7
No	1	100.0	1	50.0	13	43.3	28	27.7	8	20.0	51	29.3
Total	1	100	2	100	30	100	101	100	40	100	174	100
No of clients for sexual intercourse during the past one year (n=123)												
1-2	-	-	-	-	8	47.1	37	50.7	18	56.3	63	51.2
2-3	-	-	-	-	1	5.9	16	21.9	10	31.3	27	22.0
4-5	-	-	1	100.0	4	23.5	9	12.3	3	9.4	17	13.8
More than 5	-	-	-	-	4	23.5	11	15.1	1	3.1	16	13.0
Average number	-		5.1		5.0		3.3		2.5		3.3	
Total			1	100	17	100	73	100	32	100	123	100

3.3.3 Condom use with female sex worker's in Nepal

The table below presents the findings regarding condom use by MLM during sexual relations with female sex workers in Nepal. These questions regarding condom use with FSWs was asked only to those respondents who reported their last sexual encounter with an FSW in Nepal in the past year. Nearly half of the MLM (49.6%) had used a condom during the last sexual intercourse with an FSW, whereas the remaining half (50.44%) reported not using a condom. Among those who had sex, in most of the cases (86.9%), the condom use was suggested by the MLM himself whereas in the remaining cases, the suggestion was made by the partner (11.5%) and other person's (1.6%). Out of those

respondents who had not used condoms, the reason reported in most of the cases were “I did not like to use it” (50.0%), “Not available” (38.7%) and “Didn’t think it was necessary” (29.0%).

About one-fourth of the respondents (25.2%) had used a condom consistently when they had sex with FSWs in the past one year, and this practice was considerably higher among the respondents of Illam district (100.0%) than the respondents of other districts. The survey also explored the reasons behind not using condom a every time and the most reported reason was “I didn’t like to use it” (66.3%) followed by other reasons such as “Not available” (48.9%), and “Didn’t think it was necessary” (30.4%).

Table 8: Condom Use with Female Sex Worker in Nepal

Condom Use (n=123)	Illam		Jhapa		Morang		Sunsari		Total	
	n	%	n	%	n	%	n	%	N	%
Use of condom with client in the last sex (n=123)										
Yes	1	100.0	9	52.9	35	47.9	16	50.0	61	49.6
No	-	-	8	47.1	38	52.1	16	50.0	62	50.4
Total	1	100	17	100	73	100	32	100	123	100
Condom use suggested in the last sex (n=61)										
Myself	1	100.0	9	100.0	29	82.8	14	87.5	53	86.9
My Partner	-	-	-	-	5	14.3	2	12.5	7	11.5
Other Person	-	-	-	-	1	2.9	-	-	1	1.6
Total	1	100	9	100	35	100	16	100	61	100
Reasons for not using condom*										
Not available	-	-	3	37.5	15	39.5	6	37.5	24	38.7
Partner objected	-	-	-	-	2	5.3	1	6.3	3	4.8
I didn't like to use it	-	-	4	50.0	22	57.9	5	31.3	31	50.0
Didn't think it was necessary	-	-	2	25.0	13	34.2	3	18.8	18	29.0
Didn't think of it	-	-	-	-	3	7.9	9	56.3	12	19.4
Consistent use of condom with the client in the past year (n=123)										
All of the time	1	100.0	7	41.2	14	19.2	9	28.1	31	25.2
Most of the time	-	-	4	23.5	21	28.8	8	25.0	33	26.8
Some of the time	-	-	1	5.9	22	30.1	7	21.9	30	24.4
Rarely	-	-	1	5.9	2	2.7	1	3.1	4	3.3
Never	-	-	4	23.5	14	19.2	7	21.9	25	20.3
Total	1	100	17	100	73	100	32	100	123	100

Reasons for not using condom every time										
Not available	-	-	3	30.0	33	55.9	9	39.1	45	48.9
Partner objected	-	-	1	10.0	7	11.9	4	17.4	12	13.0
I didn't like to use it	-	-	6	60.0	40	67.8	15	65.2	61	66.3
Didn't think it was necessary	-	-	4	40.0	17	28.8	7	30.4	28	30.4
Didn't think of it	-	-	-	-	8	13.6	8	34.8	16	17.4

*Multiple responses

3.3.4 Sexual Behavior with Female Sex Workers when living in India

The table below depicts the results regarding the sexual behavior of male labour migrants with female sex workers during their stay in India. Only those respondents who reported having sex with female sex worker were asked these questions to assess their sexual behavior. Most of the respondents (85.1%) reported having sex with female sex workers in India and 69.4 percent had such relation within the past year. Nearly half (49.4%) of the respondents had sex with 1-2 FSWs, 32.5 percent had sex with 3-4 FSWs, 7.80 percent had sex with 5-6 FSWs, and 10.3 percent had sex with more than six FSWs in India.

Table 9: Sexual Behavior with Female Sex Workers when living in India

Sexual Behavior	Dhankuta		Illam		Jhapa		Morang		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Ever had sex with female sex workers in India (n=261)												
Yes	-	-	1	50.0	31	62.0	136	92.5	54	88.5	222	85.1
No	1	100.0	1	50.0	19	38.0	11	7.5	7	11.5	39	14.9
Total	1	100	2	100	50	100	147	100	61	100	261	100
Sex with a female sex worker when in India in the past year (n=222)												
Yes	-	-	-	-	14	45.2	108	79.4	32	59.3	154	69.4
No	-	-	1	100.0	11	35.5	9	6.6	3	5.6	24	10.8
NA	-	-	-	-	6	19.4	19	14.0	19	35.2	44	19.8
Total	-	-	1	100	31	100	136	100	54	100	222	100
Number of female sex workers with whom sexual intercourse occurred in India during past year (n=154)												
1-2	-	-	-	-	8	57.1	51	47.2	17	53.1	76	49.4
3-4	-	-	-	-	5	35.7	38	35.2	7	21.8	50	32.5
5-6	-	-	-	-	-	-	7	6.50	5	15.6	12	7.80
More than 6	-	-	-	-	1	7.10	12	11.20	3	9.30	16	10.3

Mean number	-	-	-	-	2.6	3.6	3.6	3.5				
Total	-	-	-	-	14	100	108	100	32	100	154	100

3.3.5 Condom use with Female Sex worker during India stay

The survey also assessed the use of condom by the MLM with FSWs during their India stay. The respondents who revealed having sexual intercourse with FSWs in the past year were asked specific questions regarding condom use. More than half (58.4%) of the MLM had used a condom during their last sexual experience with an FSW in India. Among them, in most of the cases (76.7%) the decision for using the condom was found to be made by the MLM themselves. However, out of 41.6 percent of the respondents who didn't use a condom during their last sexual encounter with an FSW, the major reasons outlined were; "I didn't like to use it" (50.0%), "Not available" (46.9%), "Didn't think it was necessary" (35.9%) etc.

A total of 33.8 percent of MLM, who previously reported having an sexual intercourse with FSW in India were found to have used condom consistently in the past year. Whereas the rest reported inconsistent condom use (sometimes, rarely or never). Among those who never used a condom during such encounters, the major reasons for this behavior were; unavailability of condom (46.1%) and didn't like to use it (45.1%).

Table 10: Condom use with Female Sex worker during India stay

Condom Use	Jhapa		Morang		Sunsari		Total	
	n	%	n	%	n	%	N	%
Use of Condom with sex worker in last sex in India (n=154)								
Yes	12	85.7	61	56.5	17	53.1	90	58.4
No	2	14.3	47	43.5	15	46.9	64	41.6
Total	14	100	108	100	32	100	154	100
Condom use suggested in the last sex (n=90)								
Myself	12	100.0	44	72.1	13	76.5	69	76.7
My Partner	-	-	13	21.3	2	11.8	15	16.7
Other Person	-	-	4	6.6	2	11.8	6	6.7
Total	12	100	61	100	17	100	90	100
Reason for not using condom*								
Not available	1	50.0	23	48.9	6	40.0	30	46.9
Too expensive	-	-	1	2.1	1	6.7	2	3.1
Partner objected	-	-	7	14.9	3	20.0	10	15.6
I didn't like to use it	1	50.0	24	51.1	7	46.7	32	50.0

Didn't think it was necessary	-	-	19	40.4	4	26.7	23	35.9
Didn't think of it	-	-	10	21.3	5	33.3	15	23.4
Consistent use of condom with sex workers in India in the past year (n=154)								
All of the time	10	71.4	30	27.8	12	37.5	52	33.8
Most of the time	2	14.3	27	25.0	6	18.8	35	22.7
Some of the time	1	7.1	25	23.1	7	21.9	33	21.4
Rarely	1	7.1	7	6.5	2	6.3	10	6.5
Never	-	-	19	17.6	5	15.6	24	15.6
Total	14	100	108	100	32	100	154	100
Reasons for not using condom always*								
Not available	1	25.0	40	51.3	6	30.0	47	46.1
Partner objected	1	25.0	6	7.7	2	10.0	9	8.8
I didn't like to use it	2	50.0	30	38.5	14	70.0	46	45.1
Didn't think it was necessary	1	25.0	28	35.9	7	35.0	36	35.3
Didn't think of it	-	-	12	15.4	5	25.0	17	16.7

*Multiple responses

3.3.6 Condom use with Wife/Girlfriend in Nepal

The table below shows the condom use practices of MLM during sexual encounters with their wives/ girlfriends during their last sexual encounter. More than one-fourth of the respondents had used a condom during this last sexual encounter with a wife/girlfriend, and the use was found to be suggested by the respondents themselves in most of the cases (86.4%). Out of those who did not use a condom (73.5%), the major reasons outlined were: not liking its use (65.1%), didn't think it was necessary (50.1%) and objection by the partner (19.6%).

Most of the respondents had never used condom during sexual encounters with their wives/girlfriend (43.1%). However, about 14.2 percent of them were identified to be consistent condom users in the past year. Out of those who never used a condom, the major reasons reported were: not liking to use it (70.1%), didn't think it was necessary (48.8%) and objection by the partner (18.9%).

Table 11: Condom use with Wife/Girlfriend in Nepal

Condom Use	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%

Use of condom with wife/ Girlfriend during last sex (n=499)														
Yes	1	8.3	-	-	54	30.2	43	22.6	4	40.0	30	31.3	132	26.5
No	11	91.7	12	100.	125	69.8	147	77.4	6	60.0	66	68.8	367	73.5
Total	12	100	12	100	179	100	190	100	10	100	96	100	499	100
Condom use suggested in last sex (n=132)														
Myself	1	100.	-	-	51	94.4	36	83.7	4	100.	22	73.3	114	86.4
My Partner	-	-	-	-	2	3.7	7	16.3	-	-	8	26.7	17	12.9
Other Person	-	-	-	-	1	1.9	-	-	-	-	-	-	1	.8
Total	1	100	-	-	54	100	43	100	4	100	30	100	132	100
Reasons for not using condom*														
Not available	-	-	-	-	9	7.2	26	17.7	-	-	9	13.6	44	12.0
Partner objected	8	72.7	5	41.7	30	24.0	21	14.3	4	66.7	4	6.1	72	19.6
I didn't like to use it	7	63.6	5	41.7	70	56.0	105	71.4	4	66.7	48	72.7	239	65.1
Didn't think it was necessary	1	9.1	7	58.3	44	35.2	87	59.2	1	16.7	44	66.7	184	50.1
Didn't think of it	2	18.2	2	16.7	4	3.2	34	23.1	1	16.7	10	15.2	53	14.4
Consistent use of condom with wife/girlfriend during sex in the last year (n=499)														
All of the time	1	8.3	-	-	33	18.4	18	9.5	3	30.0	16	16.7	71	14.2
Most of the time	-	-	-	-	13	7.3	36	18.9	-	-	12	12.5	61	12.2
Some of the time	-	-	-	-	23	12.8	32	16.8	1	10.0	20	20.8	76	15.2
Rarely	5	41.7	2	16.7	39	21.8	12	6.3	2	20.0	8	8.3	68	13.6
Never	6	50.0	9	75.0	67	37.4	89	46.8	4	40.0	40	41.7	215	43.1
Not Applicable	-	-	1	8.3	4	2.2	3	1.6	-	-	-	-	8	1.6
Total	12	100	12	100	179	100	190	100	10	100	96	100	499	100
Reasons for not using condom every time*														
Not available	-	-	-	-	5	3.4	48	27.9	-	-	13	16.3	66	15.4
Too expensive	-	-	-	-	-	-	2	1.2	-	-	-	-	2	.5
Partner objected	8	72.7	6	50.0	34	23.3	20	11.6	4	57.1	9	11.3	81	18.9
I didn't like to use it	8	72.7	8	66.7	92	63.0	126	73.3	5	71.4	61	76.3	300	70.1
Didn't think it was necessary	1	9.1	4	33.3	61	41.8	89	51.7	2	28.6	52	65.0	209	48.8
Didn't think of it	3	27.3	4	33.3	4	2.7	43	25.0	-	-	12	15.0	66	15.4

*Multiple responses

3.3.7 Condom Use with Girlfriend during India Stay

The table below presents the findings regarding the sexual behavior of MLM with their girlfriends during their stay in India as well as condom use practices. In total, 36.1 percent of the MLM had sex with their girlfriend in the past one year in India. The proportion of respondents who had sex with a girlfriend was null in districts: Illam and Panchthar. Close to half of the MLM has used a condom during their last sexual encounter (48.9%), and the condom use was found to be suggested by the respondents themselves in most of the cases (77.3%).

The survey also assessed the reasons behind not using a condom during the last sexual encounter and the major reasons outlined were: not liking to use it (72.8%) and didn't think it was necessary (45.7%). About 20.6 percent of the respondents were identified as consistent condom user throughout the past one year. However, 17.2 percent of the respondents had never used a condom with their girlfriends in India and the most commonly stated reason was: not liking to use it (75.5%).

Table 12: Condom Use with Girlfriend during India Stay

Condom Use	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Ever had sexual intercourse with girlfriend in India (n=499)														
Yes	1	8.3	-	-	25	14.0	107	56.3	-	-	47	49.0	180	36.1
No	11	91.7	12	100.	154	86.0	83	43.7	10	100.	49	51.0	319	63.9
Total	12	100	12	100	179	100	190	100	10	100	96	100	499	100
Use of condom with girlfriend during last sex in India (n=180)														
Yes	1	100.	-	-	20	80.0	43	40.2	-	-	24	51.1	88	48.9
No	-	-	-	-	5	20.0	64	59.8	-	-	23	48.9	92	51.1
Total	1	100	-	-	25	100	107	100	-	-	47	100	180	100
Condom use suggested in last sex (n=88)														
Myself	1	100.	-	-	19	95.0	29	67.4	-	-	19	79.2	68	77.3
My Partner	-	-	-	-	1	5.0	8	18.6	-	-	3	12.5	12	13.6
Other Person	-	-	-	-	-	-	6	14.0	-	-	2	8.3	8	9.1
Total	1	100	-	-	20	100	43	100	-	-	24	100	88	100

Reasons for not using condom *														
Not available	-	-	-	-	1	20.0	26	40.6	-	-	6	26.1	33	35.9
Partner objected	-	-	-	-	-	-	15	23.4	-	-	8	34.8	23	25.0
I didn't like to use it	-	-	-	-	4	80.0	43	67.2	-	-	20	87.0	67	72.8
Didn't think it was necessary	-	-	-	-	2	40.0	31	48.4	-	-	9	39.1	42	45.7
Didn't think of it	-	-	-	-	-	-	8	12.5	-	-	4	17.4	12	13.0
Use of condom with girlfriend during sex in India (last one year) (n=180)														
All of the time	1	100.0	-	-	10	40.0	17	15.9	-	-	9	19.1	37	20.6
Most of the time	-	-	-	-	-	-	25	23.4	-	-	6	12.8	31	17.2
Some of the time	-	-	-	-	-	-	16	15.0	-	-	7	14.9	23	12.8
Rarely	-	-	-	-	5	20.0	8	7.5	-	-	5	10.6	18	10.0
Never	-	-	-	-	-	-	26	24.3	-	-	5	10.6	31	17.2
Not Applicable	-	-	-	-	10	40.0	15	14.0	-	-	15	31.9	40	22.2
Total	1	100	-	-	25	100	107	100	-	-	47	100	180	100
Reasons for not using condom always*														
Not available	-	-	-	-	-	-	39	50.6	-	-	9	33.3	48	43.6
Partner objected	-	-	-	-	-	-	11	14.3	-	-	7	25.9	18	16.4
I didn't like to use it	-	-	-	-	6	100.	53	68.8	-	-	24	88.9	83	75.5
Didn't think it was necessary	-	-	-	-	2	33.3	36	46.8	-	-	13	48.1	51	46.4
Didn't think of it	-	-	-	-	-	-	12	15.6	-	-	4	14.8	16	14.5

*Multiple responses

3.3.8 Availability of Condoms

About 14.6 percent of the respondents surveyed usually carried condoms. Condom carrying practice was observed as highest in MLM of Panchthar district. Whereas, it was zero in respondents from Illam district. Out of those who carried condoms, more than one-third obtained the condoms by purchasing (34.1%). Most of the respondent's identified obtaining their condoms in places as; Pharmacies (81.1%) and Health posts/Health centers

(64.8%). Other different sources mentioned were: Private clinics (25.1%), Hospitals (20.6%), General retail stores (15.4%), Paan shops (10.5%) and FPAN clinics (8.4%). Similarly, most of the respondents (82.9%) outlined health posts/health centers as the most convenient place to obtain condoms free of cost. Other places to access condoms free of cost were FPAN Clinics (36.5%), Peers/Friends (31.2%), NGOs (29.4%) and Hospitals (26.5%).

Table 13: Condom obtaining places

Condom Acquisition	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Usually carry condoms														
Yes	1	7.1	-	-	33	14.7	34	15.2	2	16.7	22	15.7	92	14.6
No	13	92.9	16	100.	191	85.3	190	84.8	10	83.3	118	84.3	538	85.4
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100
Place/person from where condoms can be obtained *														
Health Post/Health Center	12	85.7	10	62.5	107	47.8	158	70.5	8	66.7	113	80.7	408	64.8
Pharmacy	12	85.7	13	81.3	169	75.4	184	82.1	10	83.3	123	87.9	511	81.1
General retail store	1	7.1	-	-	10	4.5	51	22.8	-	-	35	25.0	97	15.4
Private Clinic	4	28.6	7	43.8	71	31.7	43	19.2	7	58.3	26	18.6	158	25.1
Paan shop	-	-	-	-	2	.9	41	18.3	-	-	23	16.4	66	10.5
Hospital.	3	21.4	-	-	27	12.1	47	21.0	-	-	53	37.9	130	20.6
FPAN Clinic.	-	-	-	-	-	-	43	19.2	-	-	10	7.1	53	8.4
Peer/Friends	-	-	1	6.3	9	4.0	24	10.7	-	-	10	7.1	44	7.0
Health Workers/Volunteers.	-	-	-	-	3	1.3	16	7.1	-	-	5	3.6	24	3.8
Hotel/Lodge	-	-	-	-	1	.4	9	4.0	-	-	6	4.3	16	2.5
Brothel	-	-	-	-			30	13.4	-	-	5	3.6	35	5.6
NGO	-	-	-	-	2	.9	15	6.7	-	-	7	5.0	24	3.8
FCHVs	-	-	-	-	-	-	5	2.2	-	-	1	.7	6	1.0
Don't know	1	7.1	1	6.3	26	11.6	15	6.7	1	8.3	10	7.1	54	8.6
MLM usually obtain condoms														
I get it free of cost	-	-	1	6.3	25	11.2	6	2.7	1	8.3	7	5.0	40	6.3
I buy	6	42.9	6	37.5	76	33.9	71	31.7	5	41.7	51	36.4	215	34.1
Both	-	-	-	-	18	8.0	88	39.3	-	-	24	17.1	130	20.7
Never used condom	8	57.1	9	56.2	105	46.9	59	26.3	6	50.0	58	41.5	245	38.9
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100

Place from where condoms can be obtained for free														
Health Post/Health Center	-	-	1	100	29	67.4	81	86.2	1	100.	29	93.5	141	82.9
Hospital	-	-	-	-	18	41.9	22	23.4	-	-	5	16.1	45	26.5
FPAN Clinic	-	-	-	-	1	2.3	50	53.2	-	-	11	35.5	62	36.5
Peer/Friends	-	-	-	-	12	27.9	34	36.2	-	-	7	22.6	53	31.2
During Community programme	-	-	-	-	-	-	4	4.3	-	-	-	-	4	2.4
Health Workers/Volunteers	-	-	-	-	2	4.7	13	13.8	-	-	-	-	15	8.8
NGO	-	-	-	-	1	2.3	37	39.4	-	-	12	38.7	50	29.4
FCHVs	-	-	-	-	-	-	5	5.3	-	-	-	-	5	2.9

*Multiple responses

3.4 Other Risk Behaviors

3.4.1 Injecting drugs and syringe sharing behavior

The survey also assessed the injecting drugs and syringe sharing behavior of male labour migrants in six eastern districts. Nearly one-fourth of the respondents (21.1%) reported trying drugs in the past 30 days, and a very high majority (92.2%) revealed that they had never injected any drugs. Out of those who had injected drugs, the drug injection was found to have occurred within the last 12 months in 53.5 percent of the cases.

Furthermore, nearly three-fourths of the respondents (73.9%) were found to be currently injecting drugs, out of which about 29.4 percent had used a pre-used needle or syringe during their last drug injection. The survey also found that 5.9 percent of respondents were using pre-used needles or syringes almost every time for the past one month. Whereas, more than half (52.9%) had never used this type of injectable in the past one month.

Table 14: Injecting drugs and syringe sharing behavior

	Dhankuta		Ilam		Jhapa		Morang		Panchthar		Sunsari		Total	
	a								r					
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Tried any drugs in the past 30 days														
Yes	2	14.3	1	6.3	65	29.0	52	23.2	3	25.0	10	7.1	133	21.1
No	12	85.7	15	93.7	159	71.0	172	76.8	9	75.0	130	92.9	497	78.9
Total	14	100	16	100	224	100	224	100	12	100	140	100	630	100
Ever injected drugs														
Yes	-	-	-	-	8	3.6	32	14.3	-	-	3	2.1	43	6.8
No	14	100.	16	100.	210	93.8	192	85.7	12	100.	137	97.9	581	92.2

Don't know	-	-	-	-	6	2.7	-	-	-	-	-	-	6	1.0
Injected drugs in the last 12 months (n=43)														
Yes	-	-	-	-	3	37.5	20	62.5	-	-	-	-	23	53.5
No	-	-	-	-	5	62.5	12	37.5	-	-	3	100.	20	46.5
Total	-	-	-	-	8	100	32	100	-	-	3	100	43	100
Currently injecting drugs (n=23)														
Yes	-	-	-	-	1	33.3	16	80.0	-	-	-	-	17	73.9
No	-	-	-	-	2	66.7	4	20.0	-	-	-	-	6	26.1
Total	-	-	-	-	3	100	20	100	-	-	-	-	23	100
Used a needle or syringe that had previously been used by someone else (last time) (n=17)														
Yes	-	-	-	-	-	-	5	31.3	-	-	-	-	5	29.4
No	-	-	-	-	1	100.	10	62.5	-	-	-	-	11	64.7
Don't know	-	-	-	-	-	-	1	6.3	-	-	-	-	1	5.9
Total	-	-	-	-	1	100	16	100	-	-	-	-	17	100
Used a needle or syringe that had previously been used by someone else (past one month) (n=17)														
Almost Every Time	-	-	-	-	-	-	1	6.3	-	-	-	-	1	5.9
Sometimes	-	-	-	-	-	-	6	37.4	-	-	-	-	6	35.3
Never	-	-	-	-	1	100.	8	50.0	-	-	-	-	9	52.9
Don't Know	-	-	-	-	-	-	1	6.3	-	-	-	-	1	5.9
Total	-	-	-	-	1	100	16	100	-	-	-	-	17	100

3.5 Comprehensive Knowledge of HIV

3.5.1 Ever Heard about HIV/AIDS

The figure below displays the comprehensive knowledge of male labour migrants regarding HIV/AIDS. A very high majority of the respondents in all the survey districts had heard about HIV/AIDS. However, the respondents who knew anyone infected with HIV or who had died of AIDS was almost one-fourth of the districts (Illam, Panchthar and Morang). The exceptions were to districts; Dhankuta (7.1%), Jhapa (13.5%) and Sunsari (12.1%). Furthermore, those who had a close relative or close friend infected with HIV or died of AIDS was very low in all of the survey districts, as illustrated in Figure 5.

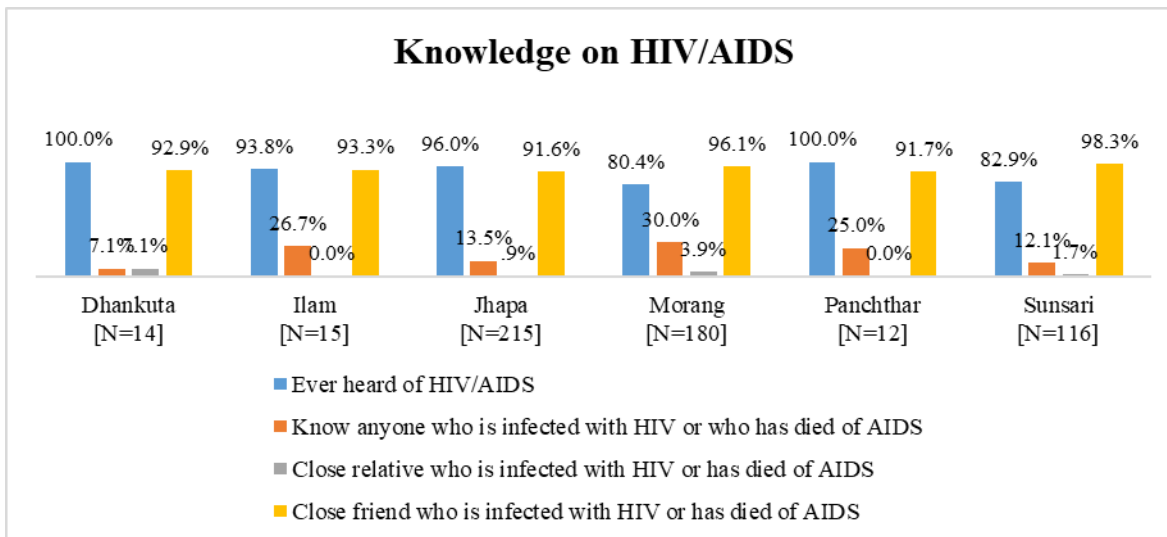


Figure 5: Knowledge of HIV and AIDS

3.5.2 Comprehensive knowledge of HIV and AIDS

The table below depicts the results regarding comprehensive knowledge of HIV/AIDS among the MLM. The proportion of MLM reporting to be aware of **A** (abstinence from sex), **B** (monogamy or being faithful to one’s partner or avoiding multiple sex partners), and **C** (consistent and correct condom use or use of a condom during every sex act) as HIV preventive measures was 53.8 percent, 72.6 percent and 85.5 percent respectively. Additionally, 68.3 percent of MLM knew that a healthy-looking person can be infected with HIV (**D**), 36.1 percent of them identified that a person cannot get HIV from a mosquito bite (**E**), and 58.9 percent knew that one cannot get HIV by sharing a meal with an HIV infected person (**F**). Overall, 35.6 percent of the MLM correctly identified all three (**A**, **B**, and **C**) as HIV preventive measures while 13.8 percent of the MLM were aware of all five major indicators (**BCDEF**).

Table 15: Comprehensive knowledge of HIV and AIDS

Knowledge of Six major Indicators on HIV/AIDS	Dhankuta		Ilam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
A. Can protect themselves through abstinence from sexual contact	9	64.3	11	73.3	78	36.3	108	60.0	9	75.0	82	70.7	297	53.8
B. Can protect themselves through monogamous sexual contact	12	85.7	12	80.0	151	70.2	122	67.8	11	91.7	93	80.2	401	72.6
C. Can protect themselves through condom use every time during sex	13	92.9	14	93.3	188	87.4	138	76.7	12	100.0	107	92.2	472	85.5

D. A healthy looking person can be infected with HIV	12	85.7	11	73.3	179	83.3	103	57.2	10	83.3	62	53.4	377	68.3
E. A person cannot get the HIV from mosquito bite	5	35.7	5	33.3	84	39.1	75	41.7	2	16.7	28	24.1	199	36.1
F. Cannot get HIV by sharing a meal with an HIV infected person	8	57.1	8	53.3	147	68.4	98	54.4	10	83.3	54	46.6	325	58.9
Knowledge of all the three indicators: ABC	8	57.1	8	50.0	62	27.7	69	30.8	9	75.0	68	48.6	224	35.6
Knowledge of all five indicators: BCDEF	4	28.6	1	6.3	44	19.6	28	12.5	2	16.7	8	5.7	87	13.8

3.5.3 Awareness of Modes of HIV Transmission

The understanding of male labour migrants about HIV and its different modes of transmission was further tested with the help of a series of questions. Most of them (92.0%) perceived that HIV could be transmitted through the transfusion of blood from an HIV infected person to another and through the use of previously used needle/syringe (96.6%). Similarly, 86.2 percent of them mentioned that pregnant women infected with HIV can transmit the virus to her unborn child. Additionally, 60.9 percent mentioned that a woman with HIV can transmit the virus to her new born child through breastfeeding. Moreover, greater than three-fourth (79.9%) perceived that a person cannot get HIV by shaking hands with an HIV infected person.

Table 16: Awareness of Modes of HIV Transmission

Awareness of Modes of HIV transmission	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
A person cannot get HIV by shaking hands with an HIV infected person's hand	13	92.9	13	86.7	194	90.2	129	71.7	11	91.7	81	69.8	441	79.9
A person can get HIV, by using previously used needle/syringe	14	100.0	15	100.0	205	95.3	171	95.0	12	100.0	116	100.0	533	96.6
Blood transfusion from an infected person to transmit HIV	13	92.9	15	100.0	211	98.1	160	88.9	12	100.0	97	83.6	508	92.0
A woman with HIV can transmit the virus to her new born child through breastfeeding	8	57.1	8	53.3	96	44.7	133	73.9	6	50.0	85	73.3	336	60.9
A pregnant woman infected with HIV can transmit the virus to her unborn child	12	85.7	13	86.7	184	85.6	151	83.9	9	75.0	107	92.2	476	86.2

3.6 Knowledge of STIs, experienced Symptoms, and Treatment in the Past Year

3.6.1 Knowledge of STIs and symptoms experienced

MLM who have more than one sex partners are at high risk of obtaining an STI. The survey also assessed the knowledge of MLM of sexually transmitted infections and their experiences of STI symptoms. The table below shows the understanding of MLM in regard to STIs and different kind of symptoms experienced. Most of the respondents understood STI as including HIV/AIDS (50.0%), Syphilis (Bhiringi) (35.6%), Ulcers around genital area (28.1%), Burning sensation while urinating (23.3%), Whitish discharge (21.7%) and Pain during urination (10.5%). Additionally, 29.5 percent of respondents knew nothing about STIs. Furthermore, different kinds of STI related symptoms were also experienced. The most common symptoms reported were ulcers or sores around genital area (11.6%) and burning sensation while urinating (10.2%).

Table 17: Knowledge of STIs and symptoms experienced

Knowledge of STIs	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Understanding of STIs*														
White Discharge/Discharge of Pus/Dhatu flow	2	14.3	1	6.3	59	26.3	39	17.4	1	8.3	35	25.0	137	21.7
Pain during urination	2	14.3	-	-	43	19.2	14	6.3	-	-	7	5.0	66	10.5
Burning Sensation while urinating	3	21.4	2	12.5	60	26.8	52	23.2	4	33.3	26	18.6	147	23.3
Ulcerous around genital area	4	28.6	2	12.5	72	32.1	63	28.1	4	33.3	32	22.9	177	28.1
Syphilis (Bhiringi)	5	35.7	2	12.5	63	28.1	93	41.5	2	16.7	59	42.1	224	35.6
HIV/AIDS	6	42.9	9	56.3	133	59.4	94	42.0	6	50.0	67	47.9	315	50.0
Don't know	6	42.9	7	43.8	53	23.7	67	29.9	5	41.7	48	34.3	186	29.5
Total	14		16		224		224		12		140		630	
Symptoms experienced														
White Discharge/Discharge of pus	-	-	1	6.3	2	0.9	18	8.0	-	-	4	2.9	25	4.0

Pain during urination	-	-	-	-	2	0.9	25	11.2	-	-	8	5.7	35	5.6
Burning sensation while urinating	-	-	2	12.5	11	4.9	41	18.3	-	-	10	7.1	64	10.2
Ulcer or sore around genital area	-	-	-	-	2	0.9	40	17.9	-	-	31	22.1	73	11.6

*Multiple responses

3.6.2 Treatment seeking for STIs

The table below presents the findings regarding treatment-seeking behavior of MLM for sexually transmitted infections. Out of total respondents surveyed, most of them had not received any treatment for STI symptoms (72.7%). More than one-fourth of them (27.3%) had received treatment for STI symptoms and the primary locations where they received treatment were private clinics (60.6%) and Hospitals (33.3%).

Table 18: Treatment seeking for STI

Treatment seeking for STIs	Illam		Jhapa		Morang		Sunsari		Total	
	N	%	N	%	N	%	N	%	N	%
Medical treatment for STI symptoms										
Yes	1	50.0	3	23.1	16	23.2	13	35.1	33	27.3
No	1	50.0	10	76.9	53	76.8	24	64.9	88	72.7
Total	2	100.0	13	100.0	69	100.0	37	100.0	121	100.0
Place from which treatment received (n=33)										
Private Clinic	-	-	2	66.7	6	37.5	12	92.3	20	60.6
Health Post/Health Center	1	100.0	-	-	2	12.5	-	-	3	9.1
Hospital	-	-	2	66.7	5	31.3	4	30.8	11	33.3
Pharmacy	-	-	-	-	4	25.0	-	-	4	12.1
Self-Treatment	-	-	-	-	2	12.5	-	-	2	6.1

*Multiple responses

3.7 Met with OE/PE, DIC, HTC, STI in past 6 months

3.7.1 Perception of HIV test

The survey also assessed the level of knowledge of MLM regarding HIV testing facilities and whether or not they had taken such tests. Most of the MLM knew about HIV testing center in the community (67.0%). Nearly one-fourth of the respondents had done testing

for HIV infection, with the most recent HIV test between 1-2 years in 29.4 percent of the respondents and more than four years ago in 34.1 percent of the respondents. Out of those respondents who ever had HIV testing, 58.7 percent of them had done HIV testing voluntarily and 41.3 percent had done it because it was required for other purposes.

Table 19: Last time HIV tested and reasons for HIV testing

Characteristics	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Know any HIV testing center (n=552)														
Yes	11	78.6	9	60.0	155	72.1	95	52.8	8	66.7	92	79.3	370	67.0
No	3	21.4	6	40.0	60	27.9	85	47.2	4	33.3	24	20.7	182	33.0
Ever had an HIV test (n=552)														
Yes	9	64.3	3	20.0	75	34.9	29	16.1	3	25.0	7	6.0	126	22.8
No	5	35.7	12	80.0	140	65.1	151	83.9	9	75.0	109	94.0	426	77.2
Total	14	100	15	100	215	100	180	100	12	100	116	100	552	100
Most recent HIV test (n= 126)														
Within last 12 months	-	-	-	-	14	18.7	5	17.2	-	-	-	-	19	15.1
Between 1-2 years	4	44.4	-	-	15	20.0	12	41.4	1	33.3	5	71.4	37	29.4
Between 2-4 years	2	22.2	-	-	14	18.7	9	31.0	-	-	2	28.6	27	21.4
More than 4 years ago	3	33.3	3	100.	32	42.7	3	10.3	2	66.7	-	-	43	34.1
Voluntarily underwent the test or because it was required (n=126)														
Voluntarily	4	44.4	1	33.3	41	54.7	24	82.8	-	-	4	57.1	74	58.7
Required	5	55.6	2	66.7	34	45.3	5	17.2	3	100.	3	42.9	52	41.3
Total	9	100	3	100	75	100	29	100	3	100	7	100	126	100

3.7.2 Knowledge and participation on service centers

The table below presents the findings regarding the knowledge and participation of MLM regarding HIV related service centers. It was found that only 16.7 percent of the respondents had met/discussed/interacted with PEs or OEs in the last 12 months. Additionally, only 4.1 percent of the MLM had visited DIC in the last 1 year, and 6.8 percent had visited an STI clinic within the last one year.

Nearly one-fourth of the respondents (31.4%) had received a visit from a CHBC health worker within the last one year. The survey also assessed the knowledge of MLM regarding PMTCT services, and it was found that only 9.8 percent of the respondents knew that HIV transmission to baby of an HIV infected pregnant mother could be prevented through PMTCT service. Whereas, more than half (61.3%) knew a place from where an HIV infected mother could receive PMTCT services.

Table 20: Knowledge and participation of service centers

	Dhankuta		Ilam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Met or Discussed or Interacted with PEs or OEs in the last 12 months	6	42.9	7	43.8	50	22.3	26	11.6	5	41.7	11	7.9	105	16.7
DIC visit in last 1 year	-	-	-	-	3	1.3	22	9.8	-	-	1	.7	26	4.1
STI visit in last 1 year	-	-	1	6.3	9	4.0	16	7.1	-	-	17	12.1	43	6.8
HTC visit in last 12 months	-	-	-	-	10	4.5	22	9.8	1	8.3	2	1.4	35	5.6
CHBC health Workers visit in house in last 1 year	8	57.1	8	50.0	75	33.5	46	20.5	5	41.7	56	40.0	198	31.4
Know that baby of HIV infected pregnant mother can be prevented	-	-	-	-	25	11.2	18	8.0	-	-	19	13.6	62	9.8

through PMTCT service															
Know a place from where a HIV infected mother get PMTCT services	-	-	-	-	6	24.0	14	77.8	-	-	18	94.7	38	61.3	

3.7.3 Visit to HTC Center

The survey showed that, the HTC visiting practice was found in only 5.6 percent of the respondents and among the remaining who had not done such visits, the primary reasons outlined were: didn't feel the need for test (64.2%), didn't know about HTC center (45.0%) and didn't have any symptoms of HIV (31.4%).

Table 21: Visit HTC Center

	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Visited any HIV Testing and Counseling (HTC) in the last 12 months														
Yes	-	-	-	-	10	4.5	22	9.8	1	8.3	2	1.4	35	5.6
No	14	100.	16	100.	214	95.5	202	90.2	11	91.7	138	98.6	595	94.4
Total	14	100.	16	100.	224	100.	224	100.	12	100.	140	100.	630	100.
Reasons for not visiting HTC center in the last 12 months(n=595)														
Didn't know about HTC center	4	28.6	6	37.5	28	13.1	146	72.3	3	27.3	81	58.7	268	45.0
Didn't feel the need for the test	9	64.3	11	68.8	167	78.0	92	45.5	7	63.6	96	69.6	382	64.2
Didn't have any symptoms of HIV	3	21.4	1	6.3	49	22.9	60	29.7	2	18.2	72	52.2	187	31.4
HTC center not nearby	1	7.1	-	-	12	5.6	35	17.3	-	-	4	2.9	52	8.7
Already had information from prior testing	-	-	-	-	8	3.7	4	2.0	-	-	2	1.4	14	2.4
Didn't have money to go to HTC center	-	-	-	-	7	3.3	2	1.0	-	-	1	.7	10	1.7

Worried about other people seeing me at the HTC center	-	-	-	-	-	-	4	2.0	-	-	2	1.4	6	1.0
Worried about family, friends, or customers finding out	-	-	-	-	-	-	5	2.5	-	-	2	1.4	7	1.2
Discrimination by health care providers	-	-	-	-	-	-	2	1.0	-	-	1	.7	3	.5

3.8 Stigma and Discrimination

The table below shows the findings regarding stigma and discrimination that are prevalent against HIV and AIDS among MLMs. It was noted that most of the MLM were willing to take care of an HIV positive relative, a male relative (83.8%) or a female relative (84.3%) at their home, if necessary. Moreover, 44.9 percent of the respondents said that they were willing to maintain the confidentiality of an HIV positive family member. In the same way, more than half of the MLM (68.9%) had no issues in buying food from an HIV infected shopkeeper. A majority of the respondents, 70.5 percent had the opinion that a PLHIV should be allowed to work together with others unless he/she were sick and 74.9 percent stated that children living with HIV infection should be allowed to attend school with other HIV negative students.

Table 22: Stigma and Discrimination

Stigma and Discrimination	Dhankuta		Ilam		Jhapa		Morang		Panchthar		Sunsari		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Willing to take care of HIV positive Male relative in the Household	14	100.0	16	100.0	181	80.8	189	84.4	11	91.7	117	83.6	528	83.8
Willing to take care of HIV Positive Female Relative in the Household	14	100.0	16	100.0	182	81.3	190	84.8	11	91.7	118	84.3	531	84.3
Willing to Maintain Confidentiality of a HIV Positive Family Member	14	100.0	14	87.5	119	53.1	86	38.4	6	50.0	44	31.4	283	44.9
Buying food from shopkeeper with HIV	12	85.7	13	81.3	174	77.7	137	61.2	12	100.	86	61.4	434	68.9
Continuation of work if PLHIV is not sick	13	92.9	15	93.8	177	79.0	155	69.2	11	91.7	73	52.1	444	70.5
Continuation of school by HIV infected children	14	100.0	15	93.8	180	80.4	157	70.1	12	100.	94	67.1	472	74.9

3.9 Prevalence of HIV

Just less than 1% (0.3%) of the surveyed MLM were diagnosed HIV positive. The respondents diagnosed with HIV belonged to the Morang district (n=2, 0.9%).

Table 23: Prevalence of HIV

Prevalence	District												Total	
	Dhankuta		Illam		Jhapa		Morang		Panchthar		Sunsari		N(630)	%
	N (14)	%	N (16)	%	N (224)	%	N(224)	%	N(12)	%	N(140)	%		
HIV positive	0	0	0	0	0	0	2	0.9	0	0	0	0	2	0.3

HIV status by socio-demographic characteristics

The table below presents the findings regarding HIV status as per socio-demographic characteristics. Just 0.9 percent of MLM were HIV positive and belonged to the Morang district. The respondents diagnosed with HIV were in the age groups, 20-29 years and 40-49 years. The MLM who tested positive were from the disadvantaged non-Dalit Terai caste group, and their age of first sexual intercourse reported was in the age groups, 15-19 years and 20-24 years. Additionally, both of the respondents who tested positive were found to have had sex with FSWs in India and condom use was lacking in both locations, i.e. in India and Nepal.

Table 24: HIV status by socio-demographic characteristics

Characteristics	HIV positive		Total(N=630)
	N	%	
Districts			
Dhankuta			14
Illam			16
Jhapa			224
Morang	2	0.9	224
Panchthar			12
Sunsari			140
Age of respondents			
18-19 years			101
20-29 years	1	0.3	308
30-39 years			147
40-49 years	1	1.4	74

Level of education			
Basic education (grade 1-8)	1	.4	224
Secondary (9-10)			64
SLC passed			182
Intermediate passed and above			69
Literate			48
Illiterate	1	2.3	43
Ethnicity			
Dalit			36
Disadvantaged Janajatis			250
Disadvantaged non-dalit Terai caste groups:	2	1.3	159
Religious Minorities			27
Relatively advantaged Janajatis			14
Upper caste groups			144
Age at first sexual intercourse			
Less than 15 years			23
15-19 years	1	0.3	305
20-24 years	1	0.7	139
25 years and more			32
Sex with FSW in past year in Nepal			
Yes	1	0.8	123
No	1	2.0	51
Sex with FSW in past year in India			
Yes	1	0.6	154
No	1	1.5	68
Use of condom in last sex with sex worker in Nepal			
Yes			61
No	1	1.6	62
Use of condom in last sex with sex worker in India			
Yes			90
No	1	1.6	64

CONCLUSION AND RECOMMENDATION

Summary of Major Findings and Recommendation

This section presents a brief discussion of major findings of the IBBS survey among MLMs in the survey districts. This is the first round of IBBS survey among MLM among the six Eastern Terai districts of Nepal. The objective of the survey is to collect and analyze biological and behavioral trends in data related to HIV and STIs among MLMs.

MLM were young, literate and married

The mean age of MLM was 27.7 years, and more than one-third of them had only a basic level of education (1-8). Disadvantaged Janajatis accounted for the highest proportion of respondents (39.7%), and more than half of the respondents were married (53.7%). Among the married MLM, 54.6 percent had got married between at the age of 20-29 years, and 20.7 percent were married before the age of 19. Half of the respondents (50.6%) were currently living with their wives.

Most of the MLM had visited India at a very young age and had worked in average for a year

One-fourth of the respondents had worked in India for less than six months during their last visit whereas their average months of work duration in India was 12.0 months. Most of the MLM had first visited India at the age of 15-19 years (45.9%) and were found to be living with their friends (67.5%).

Sexual Behavior of MLM

Most of the MLM reported having sex with a woman (79.2%), and their first sexual intercourse happened between the ages of 15-19 years (61.1%). The mean age for first sexual intercourse was calculated to be 18.8 years. Additionally, more than half of them had a history of sexual intercourse with a female sex worker (52.3%) and the use of condoms was reported in 49.6 percent of the cases involving female sex workers in Nepal and 58.4 percent of the cases involving female sex workers in India. The use of condoms during sexual intercourse with wives/girlfriends during stays in both India and Nepal were observed to be even lower. The habit of carrying condoms was also found in 14.6 percent of the respondents and the most common locations mentioned for obtaining the condoms were pharmacies, health posts/health centers, hospitals, etc.

Injecting drug use

Nearly one-fourth of the MLM had tried any drugs (for recreational purpose) in the past 30 days, and about 6.8 percent of them had injected drugs as well. More than half of them (56.5%) had injected drugs within the past 12 months, and among them, 73.9 percent were still injecting drugs. The practice of using a pre-used needle or syringe was found in 29.4

percent of MLM, and about 5.9 percent of them were consistent users of pre-used needles/syringes.

Comprehensive knowledge of HIV and AIDS; Most of MLM were aware of major indicators of HIV/AIDS whereas the knowledge of all three ABCs and five BCDEF was low

About 87.6 percent of the MLM had heard about HIV and AIDS. Out of total respondents, 35.6 percent of them were aware of all three ABCs, and 13.8 percent had knowledge of BCDEF.

The understanding of STI and treatment seeking behavior was however low

Most of the MLM understood sexually transmitted infections as HIV/AIDS (38.9%), syphilis (35.6%) and ulcers around genital area (28.1%). Likewise, the most common STI symptoms experienced by the MLM were ulcers or sores around the genital area (11.6%) and a burning sensation while urinating (10.2%). Most of the respondents had not gone for any treatment for the symptoms experienced (72.7%), and among those who had gone for treatment (27.3%), the most common location reported was a private clinic (60.6%).

Exposure to OE/PE, DIC, HTC and STI clinics was considerably low

About 16.7 percent of the respondents had met or discussed or interacted with peer educators or outreach educators within the last 12 months. Additionally, only 4.1 percent of them visited drop in centers in the last 1 year and only 6.8 percent had made an STI visit in the last 1 year. The HTC visit was also done by only 5.6 percent of the respondents. A total of 9.8 percent of the respondents knew that HIV transmission to a baby of an HIV infected woman could be prevented through PMTCT service and more than half (61.3%) knew a place from where an HIV infected mother could get prevention of mother to child services (PMTCT) services.

Most of MLM did not perceive any form of stigma and discrimination towards the HIV patients

A majority of the respondents showed willingness in taking care of HIV positive male or female relatives in the household. More than half (68.9%) of the MLM revealed no issues in buying food from an HIV infected shopkeeper and also had the opinion that a PLHIV should be allowed to work unless he/she were sick (70.5%). Additionally, most felt that an infected child should be allowed to continue school with other non-infected children (74.9%).

Prevalence of HIV

The prevalence of HIV among male labour migrants of six eastern districts was 0.3 percent. Since this is the first round of survey conducted in these districts, there could be

no comparison to prior results. However, the HIV prevalence is similar in these survey districts, in comparison to previous rounds of IBBS surveys that have been carried out in western (0.3%) and mid to far western regions (0.6%).

Program Implications and Recommendation

- Although the prevalence of HIV is low in this survey. *Targeted interventions are necessary to prevent HIV infection among MLM. HIV Treatment, care and support are also essential to improve their quality of life and to prevent onward transmission of HIV.*
- Most of the MLM had first visited India at a young age. *Thus, early intervention and education programs are potential intervention to improve knowledge and uptake of HIV prevention and treatment services.*
- More than half of them had a history of sexual intercourse with a female sex worker, and the use of condom was reported in half of the cases which can increase the risk for HIV transmission. *Programs should focus on the promotion of the consistent use of condoms.*
- Uptake of behavioral interventions (peer education, HTC etc.) were found to be low. Incessant delivery of *targeted interventions among MLM and other key populations is essential.*
- Comprehensive knowledge on HIV is low. *Therefore, comprehensive knowledge, education, and awareness regarding HIV should be promoted through multiple channels including social media.*

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NCASC/SSO (2012). Integrated Biological and Behavioral Surveillance survey (IBBS) among Male Labour Migrants. MOHP/NCASC, Kathmandu, Nepal.

ANNEX

Annex 1: Formula for Sample Size Calculation for the IBBS Surveys

$$n = D \frac{[Z_{1-\alpha} \sqrt{2\bar{p}(1-\bar{p})} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)}]^2}{(P_2 - P_1)^2}$$

n= required minimum sample size per survey round or comparison groups

D = design effect (assumed in the following equations to be the default value of 2)

P1 = the estimated number of an indicator measured as a proportion at the time of the first survey or for the control area

P2 = the expected level of the indicator either at some future date or for the project area such that the quantity (P2P1) is the size of the magnitude of change it is desired to be able to detect

Z α = the Zscore corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (P2P1) would not have occurred by chance (α – the level of statistical significance), and

Z β = the Zscore corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P1P2) if one actually occurred (β – statistical power).

Annex2: Questionnaire

Integrated Biological and Behavioral Surveillance (IBBS) Survey among Male Labour Migrants in Eastern Districts

QUESTIONNAIRE

Name of Interviewer: _____

Code No. of Interviewer:

Date of Interview: 2018/____/____

Definition of Respondent: *“Male aged between 18 to 49 years who have gone to India for work for at least three months and have returned home within the last three years.”*

1. GENERAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
101.	Respondent ID No.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
102.	Interview Starting Time: Interview Completion Time:	Hr <input type="text"/> <input type="text"/> Min <input type="text"/> <input type="text"/> Hr <input type="text"/> <input type="text"/> Min <input type="text"/> <input type="text"/>	
103.	Where were you born?	District _____	
104.	Where do you live now?	District _____	

2. PERSONAL INFORMATION

Q. N.	Questions and Filters	Coding Categories	Skip to
201.	How old are you?	Age..... <i>(write the complete years)</i>	
202.	What is your caste? (Write code no. as per Ethnicity/Caste Manual)	Ethnicity/Caste _____ (Specify) Code No: <input type="text"/> <input type="text"/>	

Q. N.	Questions and Filters	Coding Categories	Skip to
203.	What is your educational status? (Circle '00' if illiterate, '19' for the literate without attending the school, and write exact number of the completed grade)	Illiterate.....00 Literate.....19 Grade..... <input type="text"/> <input type="text"/> (write the completed grade) S.L.C Passed.....13 Intermediate Passed.....14 Bachelor's and above.....15	
204.	What is your present marital status?	Married.....1 Divorced/permanently separated....2 Widower.....3 Never married.....4	→ Skip To Q.206
205.	How old were you when you were first Married?	Age..... (write the completed years)	
206.	With whom are you staying currently?	With wife.....1 With male friends2 With female friends.....3 Alone.....4 With parents.....5 With children.....6 Others_____96 (Specify)	
207.	How many dependents are there in your family?	Number _____	

3. WORK AND MIGRATION

Mention first place of work at first. Write detailed description of each location and duration in the table below:

Q. N.	Questions and Filters	Coding Categories	Skip to
301.	Last time when you were in India, in which city were you working?	City _____	
302.	During your last visit to India, how long did you worked there?	Duration in Months: _____	
303.	At what age did you go to India for work purpose?	Age : <input type="text"/> <input type="text"/> (write the completed years)	
304.	When did you last come back to Nepal?	Months: <input type="text"/> <input type="text"/> (Write 00 for less than one month)	

Q. N.	Questions and Filters	Coding Categories	Skip to
305.	Last time when you were India, with whom did you live?	Alone.....1 With wife.....2 With other woman.....3 With friends.....4 With relative.....5 Others_____96 (Specify)	

4. INFORMATION ON SEXUAL BEHAVIOR

Q. N.	Questions and Filters	Coding Categories	Skip to
401.	Did you ever have had sexual intercourse with a woman? (If answer is 'No' skip to 601)	Yes.....1 No.....2 →	Q.601
402.	How old were you at your first sexual intercourse?(In completed years)	Years: <input type="text"/> <input type="text"/> Don't know/can't recall.....98	
403.	Have you ever had sex with a female sex worker?	Yes.....1 No.....2 →	Q.501

Sexual Behavior with Female Sex Workers in Nepal

Q. N.	Questions and Filters	Coding Categories	Skip to
404.	Did you ever have had sex with a female sex worker in Nepal? (If answer is 'No' skip)	Yes.....1 No.....2 →	Q.412
405.	In Nepal, did you have sex with a female sex worker in the past year?	Yes.....1 No.....2 →	Q.412
406.	During past one year in Nepal, with how many female sex workers did you had sexual intercourse with?	Number: <input type="text"/> <input type="text"/>	

Condom use with Female Sex Workers in Nepal

Q. N.	Questions and Filters	Coding Categories	Skip to
407.	Did you use a condom in your last sexual Intercourse with a sex worker in Nepal?	Yes.....1 No.....2 →	Q.409

Q. N.	Questions and Filters	Coding Categories	Skip to
408.	Who suggested to use condom that time?	Myself.....1 My partner.....2 Other person.....3	→ In any response go to Q.410
409.	Why didn't you use condom that time? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others _____96 (Specify)	
410.	Over the last 1 year, how often did you use Condom while visiting sex workers in Nepal?	All of the time.....1 Most of the time.....2 Some of the time3 Rarely.....4 Never.....5	→ Q.412
411.	Why didn't you use condom always? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others _____96 (Specify)	

Sexual Behavior with Female Sex Workers while living in India

Q. N.	Questions and Filters	Coding Categories	Skip to
412.	Did you ever have had sex with a female sex workers in India? (If answer is 'No' do Probing)	Yes.....1 No.....2	→ Q.501
413.	During your last visit to India in past year, did you have sexual intercourse with female sex worker? (If respondent have returned before 12 months, circle in Not applicable)	Yes.....1 No.....2 Not Applicable.....97	→ Q.501
414.	During past one year in India, with how many female sex workers did you had sexual intercourse with?	Number: <input type="text"/> <input type="text"/>	

Condom use with Female sex workers during stay in India

Q. N.	Questions and Filters	Coding Categories	Skip to
415.	Did you use a condom in your last sexual Intercourse with a sex worker in India?	Yes.....1 No.....2	→ Q.417

Q. N.	Questions and Filters	Coding Categories	Skip to
416.	Who suggested to use condom that time?	Myself.....1 My partner.....2 Other person.....3	→ In any response go to Q.418
417.	Why didn't you use condom that time? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others_____96 (Specify)	
418.	Over the last 1 year, how often did you use Condom while visiting sex workers in India? (If respondent have returned to Nepal before 12 months, then circle 97)	All of the time.....1 Most of the time.....2 Some of the time3 Rarely.....4 Never.....5 Not applicable.....97	→ Q.501
419.	Why didn't you use condom always? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others_____96 (Specify)	

Condom use with Wife/Girlfriend

Q. N.	Questions and Filters	Coding Categories	Skip to
501.	Did you use condom in your last sexual Intercourse with your wife/girlfriend?	Yes.....1 No.....2	→ Q.503
502.	Who suggested to use condom that time?	Myself.....1 My partner.....2 Other person.....3	} In any response go to Q.504
503.	Why didn't you use condom that time? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others_____96 (Specify)	
504.	Over the last 1 year, how often did you use Condom while having sex with your wife/girlfriend?	All of the time.....1 Most of the time.....2 Some of the time3 Rarely.....4 Never.....5 Not applicable.....97	→ Q.506

Q. N.	Questions and Filters	Coding Categories	Skip to
505.	Why didn't you use condom always? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others _____96 (Specify)	

5. Condom use with Girlfriend during stay in India

Q. N.	Questions and Filters	Coding Categories	Skip to
506.	Did you ever had sexual Intercourse with your girlfriend in India?	Yes.....1 No.....2	→ Q.601
507.	Did you use condom in your last sexual Intercourse with your girlfriend in India?	Yes.....1 No.....2	→ Q.509
508.	Who suggested to use condom that time?	Myself.....1 My partner.....2 Other person.....3	In any response go to Q.510
509.	Why didn't you use condom at that time? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others _____96 (Specify)	
510.	Over the last 1 year, how often did you use Condom while having sex with your girlfriend in India? (If respondent have returned to Nepal before 12 months, then circle 97)	All of the time.....1 Most of the time.....2 Some of the time3 Rarely.....4 Never.....5 Not applicable.....97	→ Q.601
511.	Why didn't you use condom always? (Multiple answers. Do not read the possible answers)	Not available.....1 Too expensive.....2 Partner objected3 I didn't like to use it.....4 Didn't think it was necessary5 Didn't think of it.....6 Others _____96 (Specify)	

6. Condom Accessibility

Q. N.	Questions and Filters	Coding Categories	Skip to
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Q. N.	Questions and Filters	Coding Categories	Skip to
601.	Do you usually carry condoms with you?	Yes.....1 No.....2	
602.	What are the places or persons that you know, from where you can get the condoms? (Multiple answers. Do not read the possible answers)	Health Post/Health Center1 Pharmacy.....2 General retail store (<i>Kiana Pasal</i>).....3 Private Clinic.....4 Paan shop.....5 Hospital.....6 FPAN Clinic.....7 Peer/Friends.....8 Health Workers/Volunteers.....9 Hotel/Lodge..... 10 Brothel..... 11 NGO..... 12 FCHVs.....13 Others _____96 (Specify) Don't know98	→ Q.604
603.	How long does it take for you to get condom from your workplace or home?	Minutes: <input type="text"/> <input type="text"/>	
604.	How do you usually obtain condoms?	Free of cost.....1 Buy it.....2 Both.....3 Never used condom.....4	→ Q.607 → Q.701
605.	From where do you often obtain free condoms? (Multiple answers. Do not read the possible answers)	Health Post/Health Center1 Hospital 2 FPAN Clinic3 Peer/Friends.....4 During Community Program.....5 Health Workers/Volunteers.....6 NGO.....7 FCHVs.....8 Others _____96 (Specify)	
606.	Which would be the most convenient place/s for you to obtain free condoms? (Multiple answers. Do not read the possible answers)	Health Post/Health Center.....1 Hospital.....2 FPAN Clinic.....3 Peer/Friends.....4 During Community Programme.....5 Health Workers/Volunteers.....6 NGO.....7 FCHVs.....8 Others _____96 (Specify)	

Q. N.	Questions and Filters	Coding Categories	Skip to
607.	From where do you often buy condoms? (Multiple answers. Do not read the possible answers)	Pharmacy.....1 General retail store(<i>Kirana Pasal</i>).....2 Private clinic.....3 Paan Shop.....4 Others_____96 (Specify)	
608.	Which would be the most convenient places for you to buy condom? (Multiple answers. Do not read the possible answers)	Pharmacy.....1 General retail store (<i>Kirana Pasal</i>).....2 Private clinic.....3 Paan Shop.....4 Others_____96 (Specify)	

7. AWARENESS REGARDING HIV/AIDS

Q. N.	Questions and Filters	Coding Categories	Skip to
701.	Have you ever heard of HIV/AIDS?	Yes.....1 No.....2 → Q.801	
702.	Do you know anyone who is infected with HIV Or who have died of AIDS?	Yes.....1 No.....2 → Q.704	
703.	Do you have a close relative or close friend who is infected with HIV or has died of AIDS	Yes, a close relative1 Yes, a close friend2 No.....3	
704.	Can people protect themselves from HIV by having one uninfected faithful sex partner?	Yes.....1 No.....2 Don't know..... 98	
705.	Can people protect themselves from HIV by using condom correctly in each sexual contacts?	Yes.....1 No.....2 Don't know..... 98	
706.	Do you think a healthy-looking person can be infected with HIV?	Yes.....1 No.....2 Don't know..... 98	
707.	Can a person get the HIV virus from mosquito bite?	Yes.....1 No.....2 Don't know..... 98	
708.	Can a person get HIV by sharing a meal with an HIV infected person?	Yes.....1 No.....2 Don't know..... 98	
709.	Can a pregnant woman infected with HIV transmit the virus to her unborn child?	Yes.....1 No.....2 Don't know..... 98	
710.	How can a pregnant woman reduce the risk of transmission of HIV to her unborn child?	Take Medication.....1 Other.....2 Don't know.....98 → Q.711	

Q. N.	Questions and Filters	Coding Categories	Skip to
711.	Can a woman with HIV transmit the virus to her new born child through breastfeeding?	Yes.....1 No.....2 Don't know..... 98	
712.	Can people protect themselves from HIV virus by abstaining from sexual intercourse?	Yes.....1 No.....2 Don't know..... 98	
713.	Can a person get HIV by holding HIV Infected person's hand?	Yes.....1 No.....2 Don't know..... 98	
714.	Can a person get HIV by using previously used needle/syringe?	Yes.....1 No.....2 Don't know..... 98	
715.	Can blood transfusion from HIV infected person transmit HIV to others?	Yes.....1 No.....2 Don't know..... 98	
716.	Is it possible in your community for someone to have a confidential HIV test?	Yes.....1 No.....2 Don't know..... 98	
717.	If you have to go for HIV testing, do you know where you should be going?	Yes.....1 No.....2	
718.	Have you ever done HIV testing?	Yes.....1 No.....2	→ Q.801
719.	When did you have your most recent HIV test?	Within last 12 months.....1 Between 1-2 years.....2 Between 2-4 years.....3 More than 4 years ago.....4	
720.	Did you voluntarily undergo the HIV test or was it required?	Voluntarily.....1 Required.....2 No Response.....99	
721.	What was your test result?	Positive.....1 Negative.....2 Uncertain.....3 Did not receive result.....4 Don't know.....98	} Q.801 } Q.724
722.	Once you found out you were positive, did you go for counseling at the HTC?	Yes.....1 No.....2 Don't know.....98 Didn't answer.....99	→ Q.725

Q. N.	Questions and Filters	Coding Categories	Skip to
723.	Why didn't you go for counseling after you discovered that you were HIV positive?	I thought I was healthy.....1 Afraid others would find out.....2 It would cost money.....3 Bad attitude of service provider.....4 Excessive waiting period at the clinic/Unsuitable clinic hours.....5 Others_____96 (Specify) Don't know.....98 Didn't answer.....99	For any response skip to Q.725
724.	Why didn't you received your test results?	Didn't think I was infected.....1 Scared.....2 Didn't think it was important.....3 Forgot.....4 Others_____96 (Specify)	
725.	In the subsequent 12 months post discovery, have you gone for HIV related treatment?	Yes.....1 No.....2	→ Q.801
726.	Why didn't you go for HIV related treatment after discovering you were positive?	I thought I was healthy.....1 Afraid others would find out.....2 It would cost money.....3 Bad attitude of service provider.....4 Excessive waiting period at the clinic/Unsuitable clinic hours.....5 Others_____96 (Specify) Don't know.....98 Didn't answer.....99	

8. SEXUALLY TRANSMITTED INFECTION (STI)

Q. N.	Questions and Filters	Coding Categories	Skip to
801.	What diseases do you understand, If I ask you about STI? (Multiple answers. Do not read the possible answers)	White Discharge/Discharge of Pus/ <i>Dhatu</i> flow.....1 Pain during urination.....2 Burning Sensation while Urinating.....3 Ulcer or sore around genital area.....4 Syphilis (<i>Bhiringi</i>).....5 HIV/AIDS.....6 Others_____96 (Specify) Don't know..... 98	
802.	Do you have any of the following symptoms?	Yes.....1	

Q. N.	Questions and Filters	Coding Categories		Skip to
		Yes	No	
	Symptoms			
	1. Whitish discharge/discharge of pus	1	2	
	2. Pain during urination	1	2	
	3. Burning sensation while urinating	1	2	
	4. Ulcers or sore around genital area	1	2	
	96. Others(specify) _____	1	2	
	(If answer is 'No' to all in the Q.No.702 Go to Q.801)			
803.	Have you gone through medical treatment for any of these symptoms?	Yes.....1 No.....2		→ Q.901
804.	Where did you go for the treatment? (Multiple answers. Do not read the possible answers)	Private Clinic1 FPAN Clinic.....2 Health Post/Health Center.....3 Hospital.....4 Pharmacy.....5 Self-Treatment(Specify).....6 Others.....96 (Specify)		

9. USE OF DRUGS AND INJECTION

901.	Some people take different types of drugs. Have you also tried any of those drugs in the past 30 days?	Yes1 No.....2 Don't know..... 98	
902.	Some people inject drugs using a syringe. Have You ever injected drugs? (Do not count drugs injected for medical purpose or treatment of an illness)	Yes1 No.....2 Don't know..... 98	} Q. 1001
903.	Have you injected drugs in last 12 months? (Do not count drugs injected for medical purpose or treatment of an illness)	Yes1 No.....2 Don't know..... 98	} Q. 1001
904.	Are you currently injecting drugs?	Yes1 No.....2	→ Q.1001
905.	Think about the last time you injected drugs. Did you use a needle or syringe that was previously been used by someone else?	Yes1 No.....2 Don't know..... 98	

906.	Think about the time you injected drugs during past one month. How often did you inject drugs using previously used needle/syringe?	Every Time.....1 Almost Every Time.....2 Sometimes.....3 Never.....4 Don't Know.....98	
907.	Usually how do you get/did you get syringe/Needle?	My friend/relative gave it to me after his/her use.....1 Unknown person gave it to me.....2 I picked it up from a public place which was left there by others.....3 I picked it up from a public place which was left there by myself.....4 I used a new needle/syringe given by NGO volunteer.....5 I used a needle/syringe which I purchased.....6 Others(Specify)_____96	

10. STIGMA AND DISCRIMINATION

Q.N.	Questions and Filters	Coding Categories	Skip to
1001.	If a male relative of yours become ill with HIV, would you be willing to care for him in your household?	Yes1 No.....2 Don't know..... 98	
1002.	If a female relative of yours become ill with HIV, would you be willing to care for him in your household?	Yes1 No.....2 Don't know..... 98	
1003.	If a member of your family become ill with HIV, would you want it to remain a secret?	Yes1 No.....2 Don't know..... 98	
1004.	If you find out a shopkeeper or a food vendor has HIV, would you buy stuffs from them?	Yes1 No.....2 Don't know.....98 Didn't answer.....99	
1005.	In your opinion, does a person infected by HIV need same, more, or lesser healthcare than people affected by other chronic illnesses?	Same.....1 More.....2 Less.....3 Don't know.....98 Didn't answer.....99	
1006.	Do you think your colleague, who is HIV positive but not sick yet, should get to continue his/her work?	Yes1 No.....2 Don't know..... 98 Didn't answer.....99	

1007.	Do you think children infected with HIV should go to the school with uninfected children?	Yes1 No.....2 Don't know..... 98 Didn't answer.....99	
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11. KNOWLEDGE AND PARTICIPATION IN STI AND HIV/AIDS PROGRAMS

1101.	Have you met, discussed, or interacted with peer educators(PE)or community mobiliser (CM) in the last 12 months?	Yes.....1 No.....2 No response.....99	
1102.	Have you visited or been to any drop in Center (DIC) in the last 1 year?	Yes.....1 No.....2	
1103.	Have you visited any STI clinic in the last 1 year?	Yes.....1 No.....2	
1104.	Have you visited any HIV Testing and Counseling (HTC) in the last 12 months?	Yes.....1 No.....2	
1105.	Have you ever participated in HIV/AIDS Awareness raising program or community events in the last 1 year?	Yes.....1 No.....2	
1106.	What were the reasons for not visiting HTC center in the last 12 months? (Multiple answers. Do not read the possible answers)	Didn't know about HTC center....1 Didn't feel the need for the test....2 Didn't have any symptoms of HIV3 HTC center not nearby.....4 Already had information from prior testing.....5 Didn't have money to go to HTC center.....6 Worried about other people seeing me at the HTC center.....7 Worried about family, friends, or customers finding out.....8 Discrimination by healthcare providers.....9 Others (Specify)_____96	
1107.	In the last 1 year have any CHBC health Workers visited your house?	Yes.....1 No.....2	
1108.	Do you know that baby of HIV infected pregnant mother can be prevented through PMTCT service?	Yes.....1 No.....2 Don't Know.....98	If 98, end the survey.

1109.	Do you know from where can a HIV infected mother get PMTCT services?	Yes.....1 No.....2 Don't Know.....98	
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Thank the respondent